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Notice of Preparation of an Environmental Impact Report

Date:	June 30, 2010
Case No.:	**2006.1506E**
Project Title:	**749 Wisconsin Street, Residential Project**
BPA Nos.:	200612159955, 200612159951
Zoning:	RH-2 (Residential, House, Two Family) Use District 40-X Height and Bulk District
Block/Lot:	4098/027
Lot Size:	2,596 square feet
Project Sponsor:	Diane Susoev
	t Daniel Ewald, Ewald Tajbaksh Architecture (415) 255-0700
	ncisco Planning Department
	Dwyer – (415) 575-9031
	lwyer@sfgov.org

5/S

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st side of Wisconsin Street between 20th Street and Madera Street, in the
ncisco, in the block bounded by 20th Street to the north, Wisconsin Street to
th, and Arkansas Street to the west. The proposed project includes the
proximately 27-foot-tall single-family residence, currently unoccupied, and
, 40-foot-tall, approximately 4,202-square-foot residential building meeting
ndards. The proposed building would be an owner-occupied primary
rental unit. The proposed building would provide two off-street parking
below-grade garage. Pedestrian access to both residential units and vehicle
d be from Wisconsin Street. The project site is located in the *Showplace*
proposed project would require discretionary review by the Planning
dential building, approval by the Planning Department for a variance from
equired rear yard, approval by the Planning Department of the building
d new construction, approval by the Department of Building Inspection for
proval by the Bureau of Streets and Mapping of the Department of Public
ts, and approval by the San Francisco Municipal Transportation Agency for

ffect on the environment and an Environmental Impact Report is required.
he criteria of the State CEQA Guidelines, Sections 15063 (Initial Study), 15064 (Determining Significant Effect), and 15065 (Mandatory Findings of Significance), and the following reasons as documented in the Initial Evaluation (Initial Study) for the project, which is attached.

PUBLIC SCOPING PROCESS

Written comments will be accepted until 5:00 pm on July 30, 2010. Written comments should be sent to Bill Wycko, Environmental Review Officer, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103.

If you work for a responsible State agency, we need to know the views of your agency regarding the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the EIR when considering a permit or other approval for this project. Please include the name of a contact person in your agency.

June 28, 2010
Date

Bill Wycko
Environmental Review Officer

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Project Sponsor:	Diane Susoev Contact Daniel Ewald, Ewald Tajbaksh Architecture (415) 255-0700
Lead Agency:	San Francisco Planning Department
Staff Contact:	Debra Dwyer – (415) 575-9031 debra.dwyer@sfgov.org

PROJECT DESCRIPTION

The project site is located on the east side of Wisconsin Street between 20th Street and Madera Street, in the Potrero Hill neighborhood of San Francisco, in the block bounded by 20th Street to the north, Wisconsin Street to the east, Madera Street to the south, and Arkansas Street to the west. The proposed project includes the demolition of a historic one-story, approximately 27-foot-tall single-family residence, currently unoccupied, and the new construction of a four-story, 40-foot-tall, approximately 4,202-square-foot residential building meeting California GreenPoint Building standards. The proposed building would be an owner-occupied primary residence with an in-law apartment rental unit. The proposed building would provide two off-street parking spaces in a 392-square-foot, partially below-grade garage. Pedestrian access to both residential units and vehicle access to the parking garage would be from Wisconsin Street. The project site is located in the *Showplace Square/Potrero Hill Area Plan*. The proposed project would require discretionary review by the Planning Commission for demolition of a residential building, approval by the Planning Department for a variance from *Planning Code* Section 134 for the required rear yard, approval by the Planning Department of the building permits for residential demolition and new construction, approval by the Department of Building Inspection for demolition and building permits; approval by the Bureau of Streets and Mapping of the Department of Public Works for street and sidewalk permits, and approval by the San Francisco Municipal Transportation Agency for any curb or road modifications.

FINDING

This project may have a significant effect on the environment and an Environmental Impact Report is required. **This determination is based upon the criteria of the State CEQA Guidelines, Sections 15063 (Initial Study), 15064 (Determining Significant Effect), and 15065 (Mandatory Findings of Significance), and the following reasons as documented in the Initial Evaluation (Initial Study) for the project, which is attached.**

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June 28, 2010
Date

Bill Wycko
Environmental Review Officer

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INITIAL STUDY

Case Number 2006.1506E – 749 Wisconsin Street Residential Project

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INITIAL STUDY

Case Number 2006.1506E – 749 Wisconsin Street Residential Project

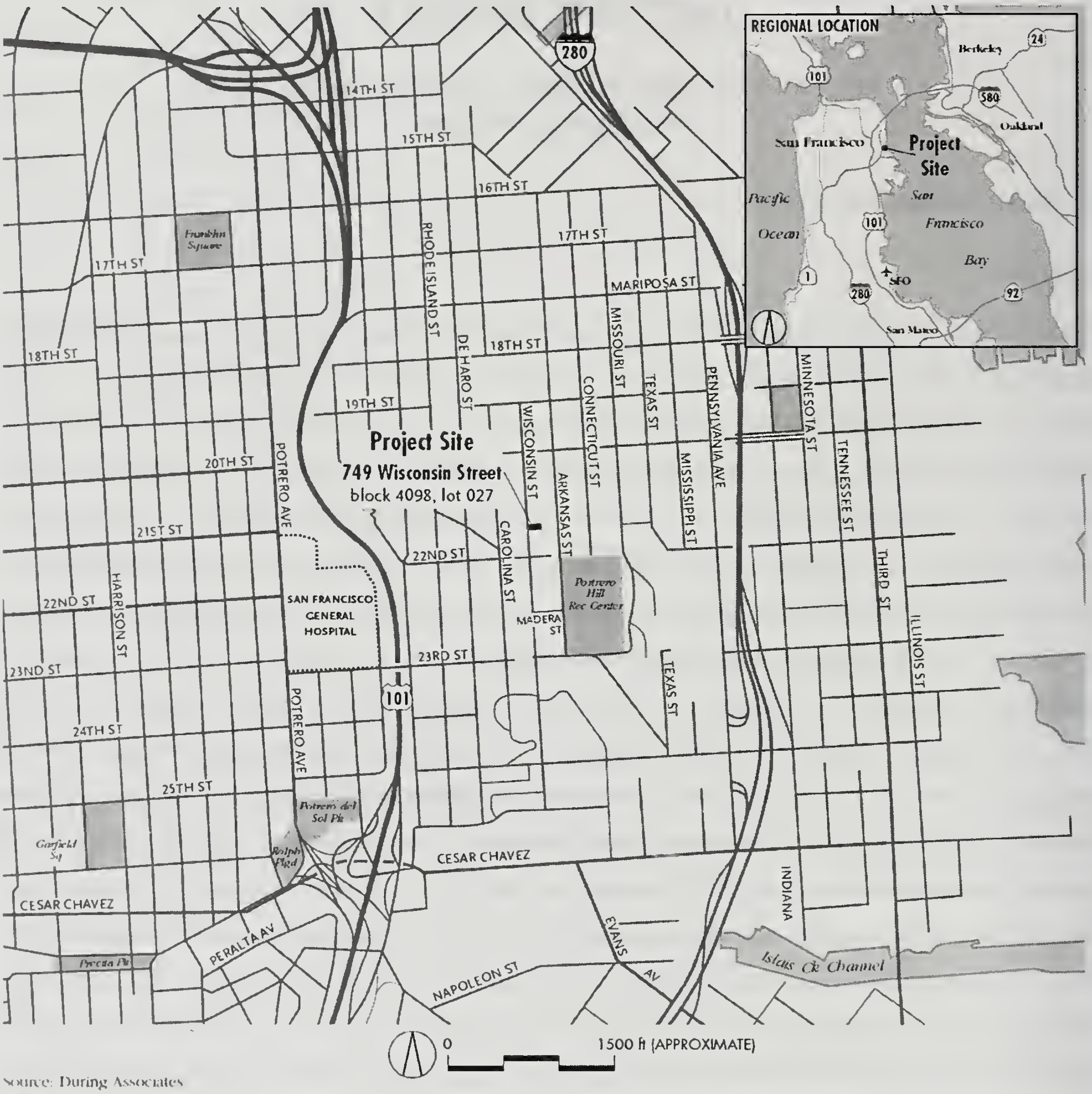
A. PROJECT DESCRIPTION

Project Site

The rectangular 2,596-square-foot (0.06 acre) project site at 749 Wisconsin Street (Assessor's Block 4098, Lot 027) is located on the east side of Wisconsin Street between 20th Street and 22nd Street in the Potrero Hill area of San Francisco (see Figures 1 and 2, pages 2 and 3). The project block is bounded by 20th Street (north), Wisconsin Street (west), Madera Street (south) and Arkansas Street (east). Twenty-first Street does not exist in this area, and 22nd Street to the south terminates prior to intersection with Arkansas Street, elongating the project block in the north-south direction. The parcel sits at approximately 267 feet above mean sea level (MSL), and slopes upwards to the south and west by approximately 11 percent (a change of 7 feet in altitude over a distance of 63 feet). The site is currently occupied by a one-story residence constructed over a garage with a height of approximately 27 feet 4 inches. The existing building, currently vacant, contains approximately 1,617 square feet of living space, 969 square feet of parking with one off-street parking space, and no loading spaces. Pedestrian and vehicle access is from Wisconsin Street. Although the Assessor's Office indicates that the building was constructed in 1904, it appears from historical documents that it was built in 1898. The existing building covers the western two-thirds of the site, while a rear yard of approximately 760 square feet occupies the eastern third of the site. The rear yard contains ground-level bushes and several small trees (less than 12 feet high and trunk diameters less than six inches wide), and a small front yard is planted with a jade plant and several bougainvilleas. There are no street trees on the project frontage, but a small street tree is planted adjacent to the northwest corner of the site.

Proposed Project

The proposed project would demolish the existing residence and remove vegetation on the site, and construct a four-story, 40-foot-tall, approximately 4,202-square-foot residential building with two residential units and a partially below-grade, 392-square-foot parking garage with two independently-accessible parking spaces (see Figures 3 through 7, pages 4 to 8). Table 1: Project Characteristics, page 9, summarizes the characteristics of the project. No off-street loading spaces would be provided.



Source: During Associates

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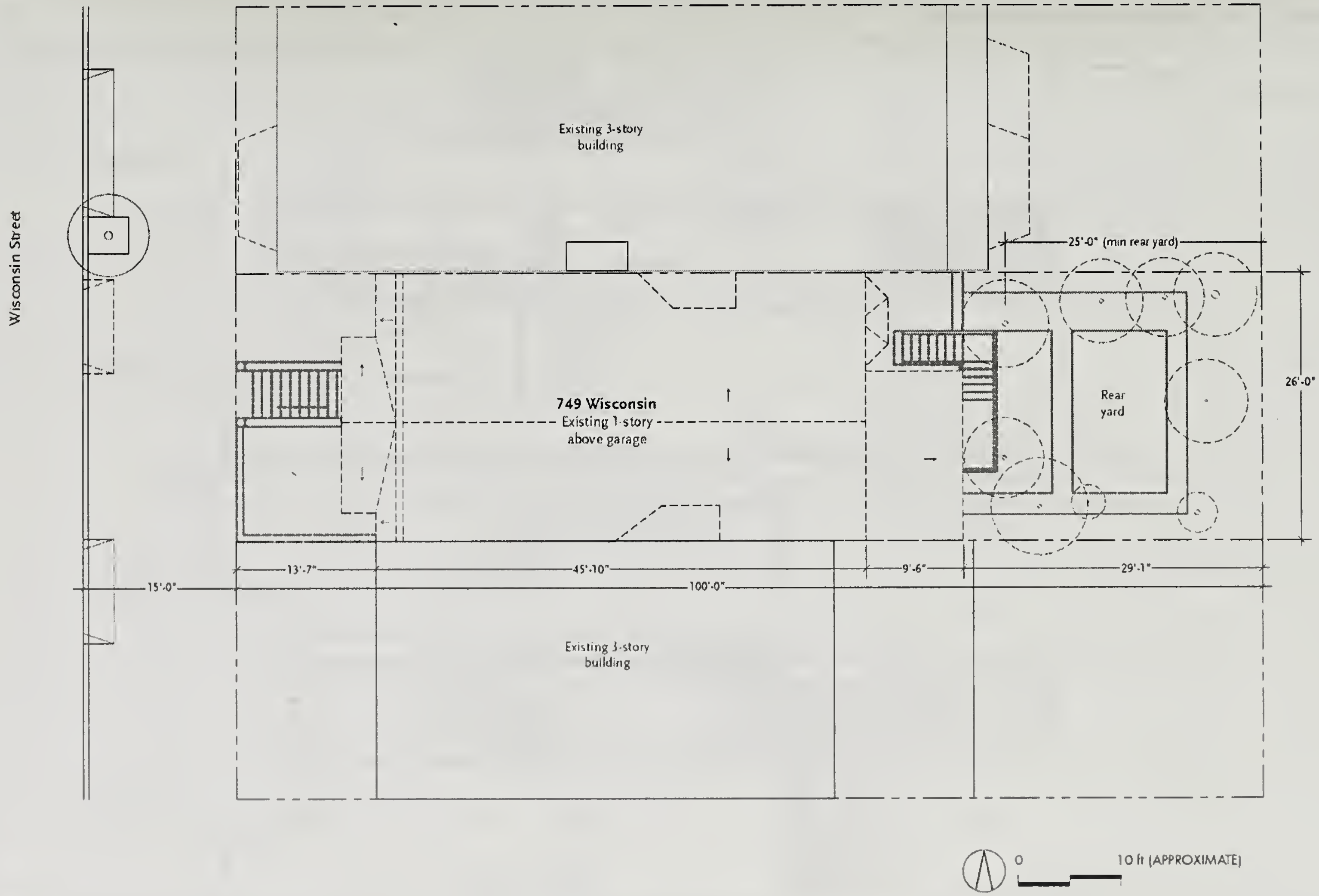
Proposed Project Location Figure 1



Source: Ewald Tajbaksh Architecture
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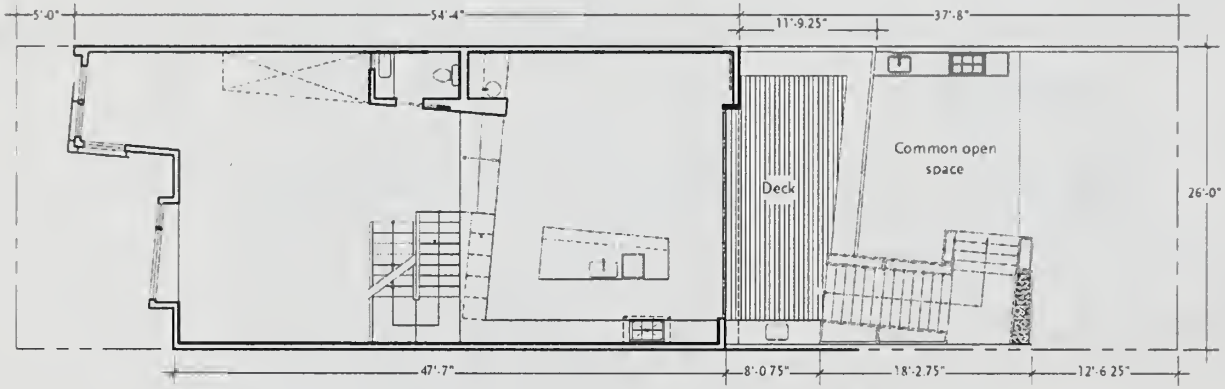
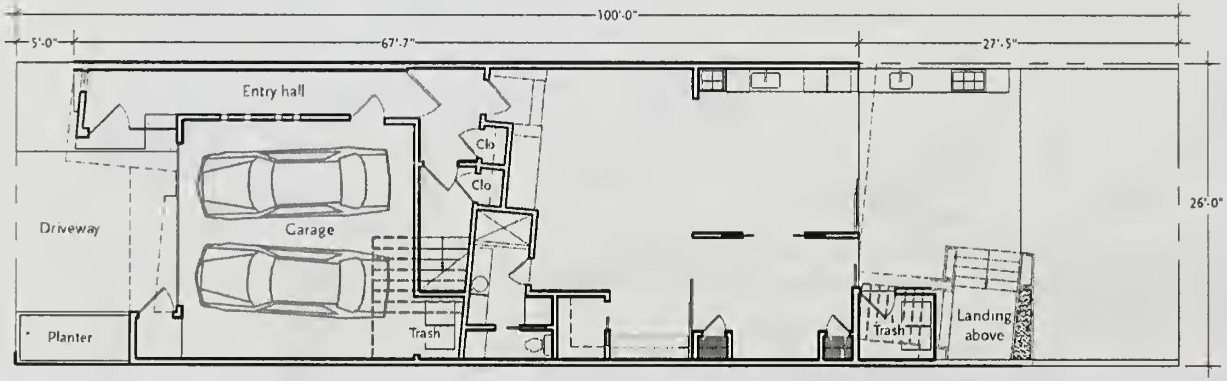
Existing Site Plan Figure 2



Second Floor Plan



First Floor Plan

Source: Ewald Tajbaksh Architecture

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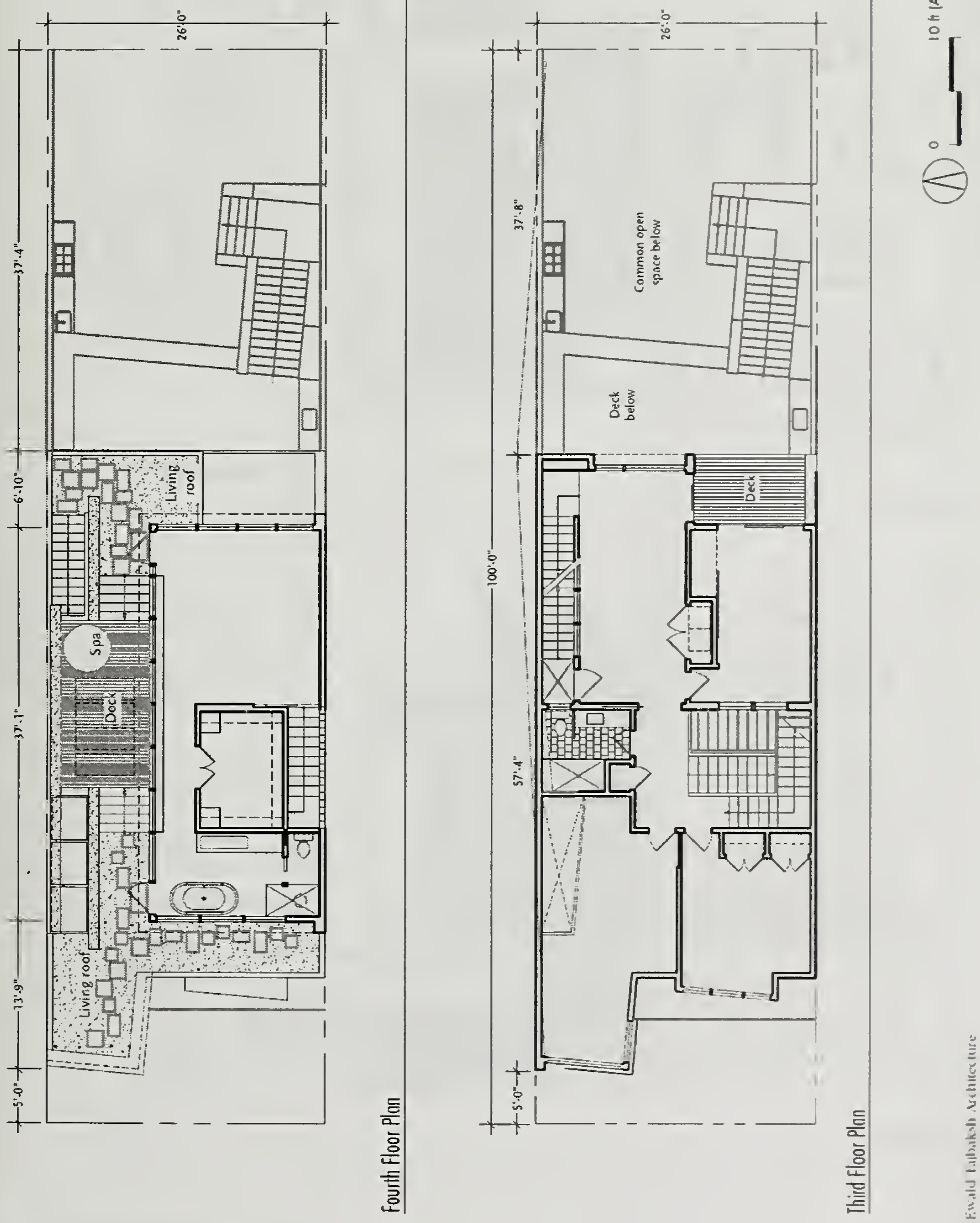
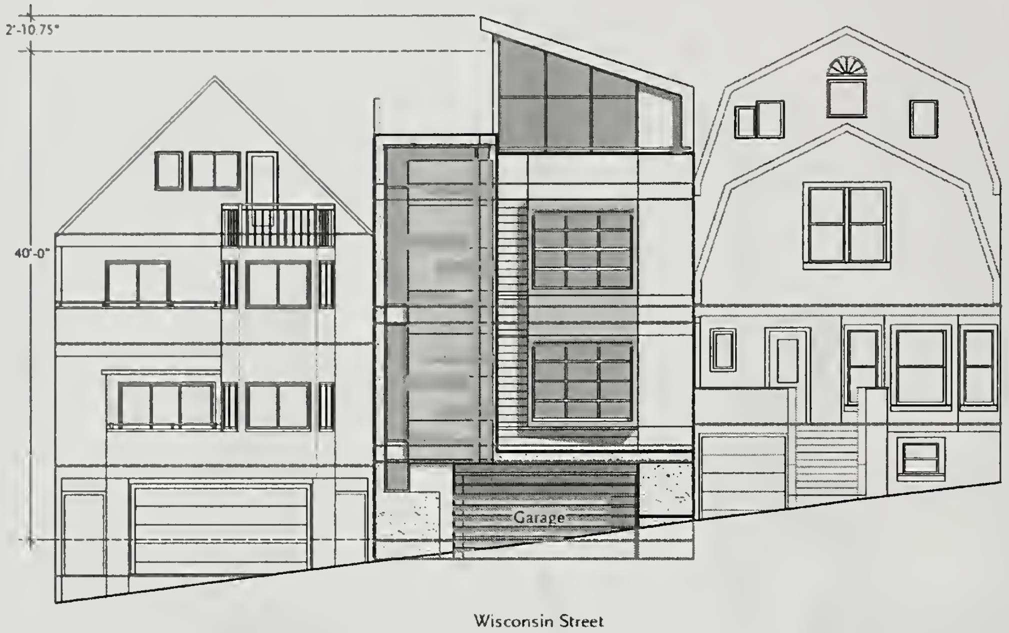
Proposed First and Second Floor Plans Figure 3

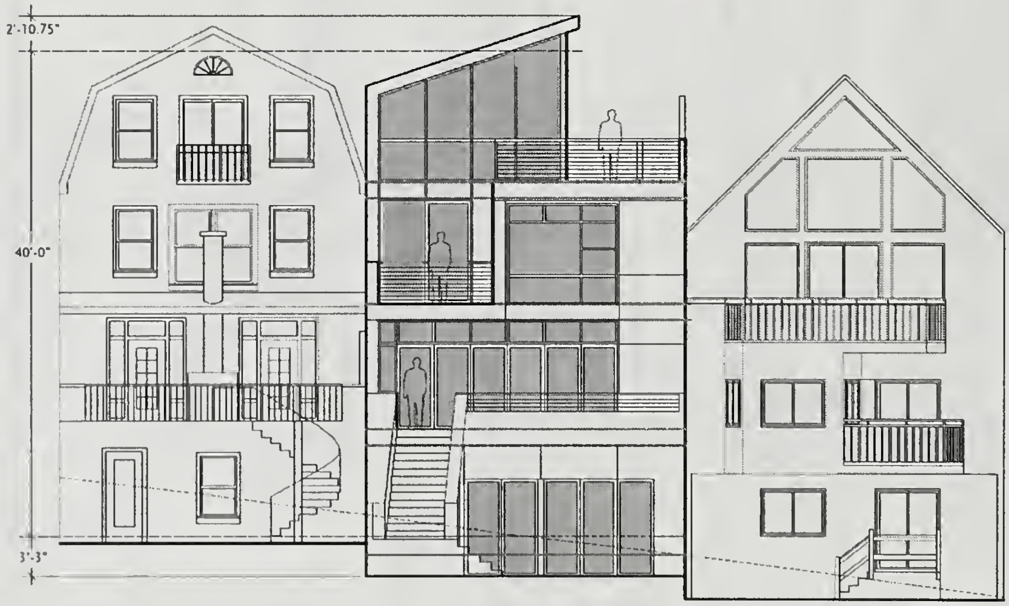


Source: Ewald Lubaksh Architecture

Proposed Third and Fourth Floor Plans Figure 4



West Elevation



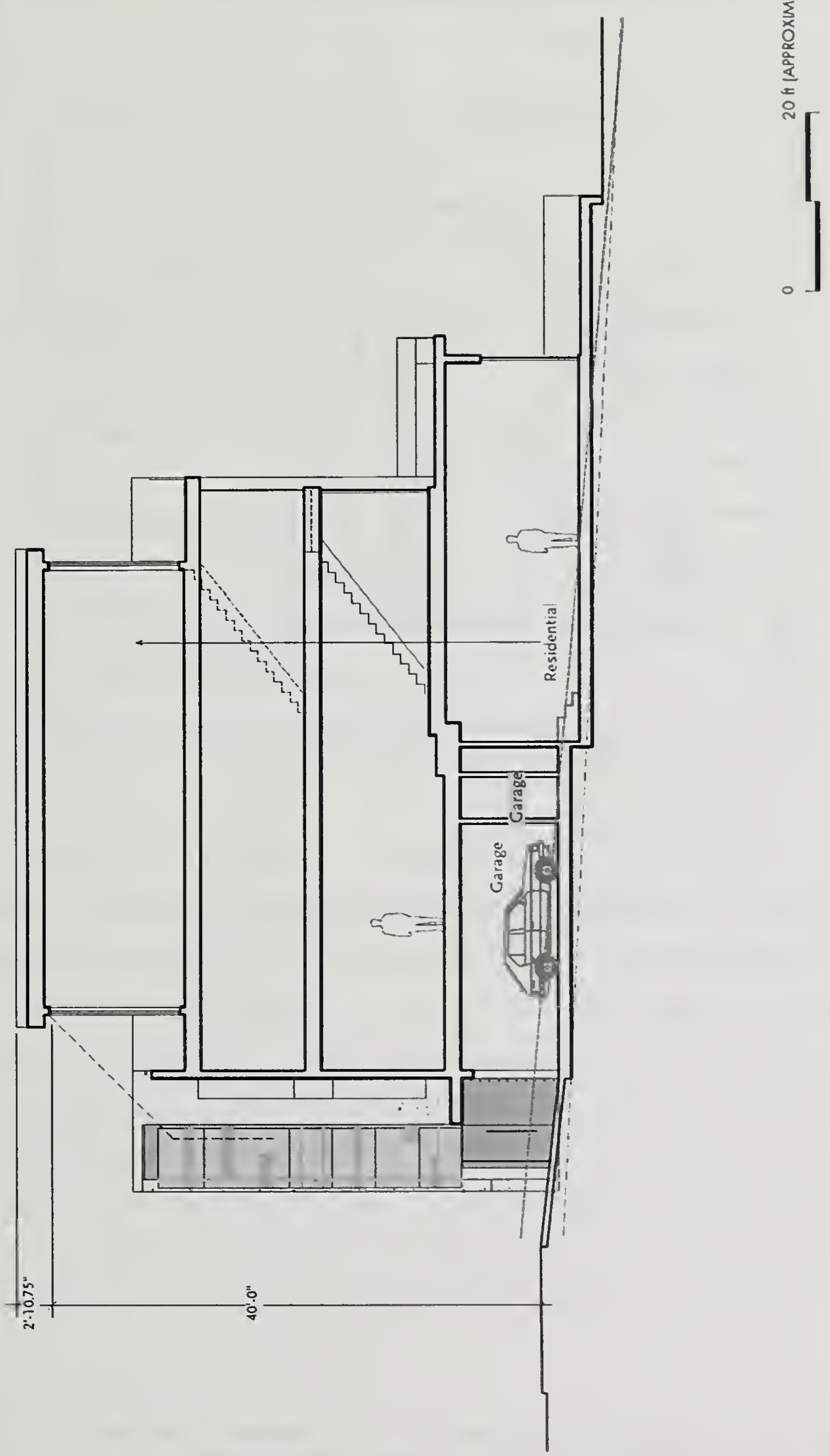
East Elevation

0 10 ft (APPROXIMATE)

Source: Ewald Tajbaksh Architecture

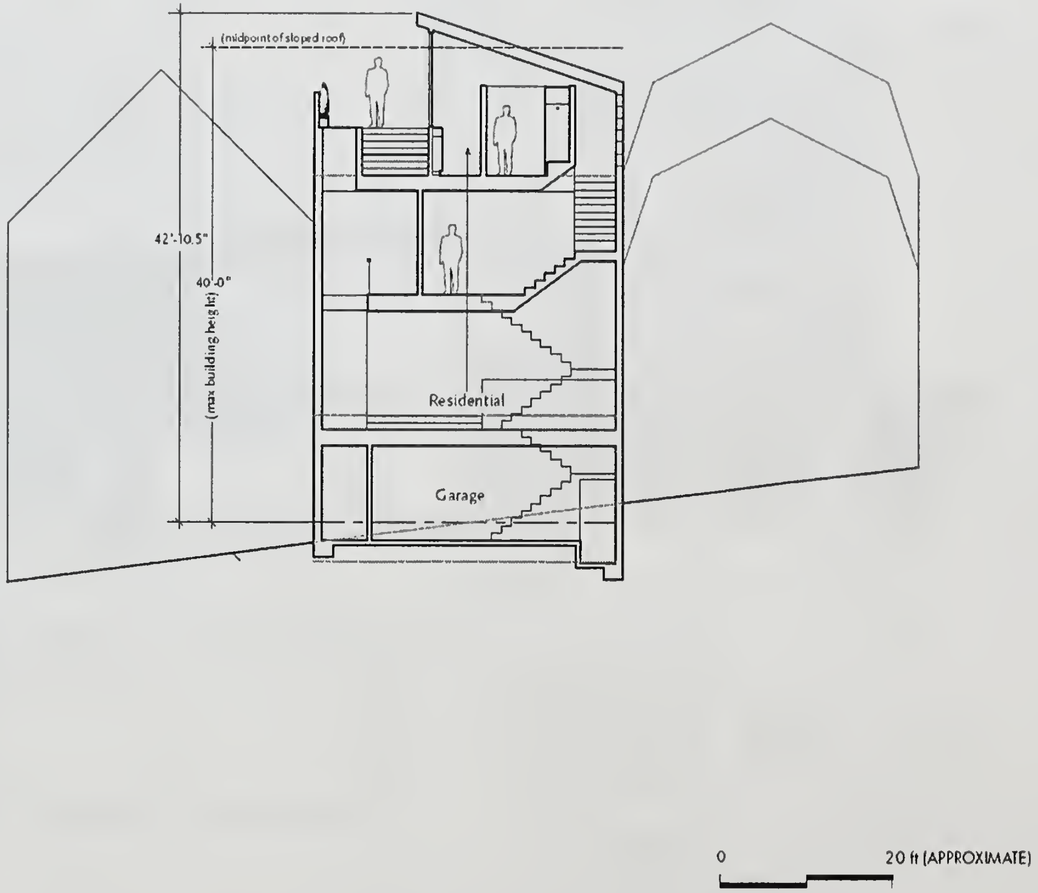
1" = 10'

Proposed Project Elevations Figure 5



Source: Ewald Tajbaksh Architecture

Proposed Longitudinal Section Figure 6



Source: Ewald Tajbaksh Architecture

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Proposed Project Cross Section Figure 7

The residential building would consist of a primary owner-occupied unit and an in-law rental apartment unit on the ground floor. The proposed building would cover approximately 75 percent of the lot.

Table 1
Project Characteristics

Building Uses	Gross Square Feet
Residential	4,202
Parking	392
Total (open space not included)	**4,594**
Open Space (common and private)	1,665
Dwelling Units	2 units
Height of Building (at midpoint of sloped roof)	40 feet
Number of Stories	4

The project is proposed to be a green (i.e., ecologically friendly) home that would be eligible for California GreenPoint Certification, denoting that the structure has high energy efficiency, is constructed using best management practices, and economically incorporates eco-conscious design features with health and sustainable community benefits. It would include a photovoltaic power supply to provide electricity, radiant hydronic heat,[1] and hot water, supplemented with an on-demand system. Windows and appliances would be Energy Star rated and energy-efficient lighting fixtures would be employed throughout the building. Architectural trims, doors, fixtures, and other building materials in the existing building would be recovered for reuse or recycled. Bricks and rock in the existing building foundation would be reused as hardscaping materials in the landscaped areas of the project. New building materials would be extracted, manufactured, or produced with a 500-mile radius of San Francisco.

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[1] *Radiant hydronic heat* is a method of central heating in which hot water is used to supply heat to individual rooms in a home, and may utilize one of a variety of circulation methods: radiators, radiant heat baseboards, or in-floor systems that utilize the thermal mass of concrete slabs. Radiant hydronic heat is energy efficient and more sustainable than other forms of central heating.

The primary residential unit would occupy the second through fourth levels and would provide approximately 3,199 square feet of residential space including three bedrooms. The second unit, occupying approximately 1,003 square feet with one bedroom, would function as an in-law apartment unit. With only two units, the project would not be subject to the City's Inclusionary Affordable Housing Program (*Planning Code*, Sections 315 et seq.), and neither unit would be below market rate.

A ground-floor entrance door located to the left of the garage entrance on Wisconsin Street would provide pedestrian entry to both residential units. A second door located to the right of the garage would provide direct pedestrian access to the garage. Both doors would face the driveway, rather than the street frontage, with elevated planters in front of each door extending to the front property line. The door to the left (north) of the garage would enter into a hallway providing interior access to the garage and connecting with a second interior entry hallway located behind the garage. This hallway would provide access to the main entry doors to both residential units, with the door to Unit 2 opening to a stairwell leading up to the residence, while Unit 1 would be located on the ground floor. The pedestrian entry portion of the building's façade would be set back from Wisconsin Street by approximately four to five feet, and the garage entry portion would be set back by approximately 13 feet.

Unit 1, with approximately 1,003 square feet of living space, would have a combined kitchen/dining area/living room, with a partitioned corner bedroom. Sliding glass doors in the living area and bedroom would lead to the rear yard, which would include a built-in barbeque and drought-resistant landscaping sustained by a drip irrigation system. The rear yard would provide approximately 620 square feet of common open space. Unit 2 would include a living room, dining room, kitchen, and half bathroom on the second level, with sliding glass doors looking out on an approximately 297-square-foot deck, which would have stairs`leading down to the rear yard. The third level would include two bedrooms, a full bathroom, a studio, and an office, with a rear deck of approximately 68 square feet accessible from the office and the rear bedroom. A clerestory[2] open to an exterior stairwell on the north side of the building would provide natural light to the office. The stairwell would lead from the office to the raised fourth-level deck of about 130 square feet, which would include an outdoor spa shielded by planter boxes. In addition to the deck, which would be elevated 3 feet above the fourth-floor living space, the fourth level would consist of a 250-square-foot master bedroom, with a walk-in closet and master bathroom. Both the bathroom and bedroom would have doors providing access to front and rear sections, respectively, of the walkable living roof, which would be planted with drought-tolerant sedges. The living roof and decks on the second, third, and fourth levels would provide 1,045 square feet of private open space for the Unit 2 residents.

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[2] A *clerestory* is a high wall with a band of narrow windows along the very top. A clerestory wall usually rises above adjoining roofs.

As shown on Figure 4, steps would lead from both roof sections up to the wood deck and hot tub. The fourth-floor living space would be topped with a sloped standing-seam metal roof covered with an array of rectangular photovoltaic solar panels providing the building's primary energy source.

A series of four cistern tanks located under the raised fourth-level deck would store captured rainwater for reuse as irrigation water for the rear-yard landscaping.

The proposed building would have a contemporary design and be finished with modern materials. The building façade would be finished with Eco-Cem cement panels strengthened with cellulose fiber. The second- and third-floor window bays would be surrounded by bronzed copper panels. Similar panels would surround the garage door, which would be surfaced in textured bronzed copper. Large window expanses on the upper floors would be divided into multiple lights by aluminum frames. Frameless etched-glass screens with semi-transparent integrated photovoltaics ornamented with horizontal clear bands would cover the left side of the front building façade, providing both power and light and privacy screening to the second-floor studio and third-floor dining room, and also providing a four-foot-high wall in front of the fourth-floor roof section, topped by an overhanging concrete parapet.

Although the midpoint of the sloped roof would be 40 feet high, consistent with the 40-X height and bulk district applicable to the site, it would be approximately 42 feet 10.5 inches at the apex of the roof.

The proposed building would be constructed on a poured perimeter footing foundation, which would require excavation to a depth of approximately 2 feet below the existing ground surface for the one-level parking garage and foundation. The excavation would require removal of approximately 10 cubic yards of soil. In addition, an outcrop of serpentine bedrock in the southwest, front-facing portion of the site, measuring approximately 20 feet by 9 feet by 4 feet, and extending approximately two feet above grade, would be removed from the site with a jackhammer or pickaxe. One of the components of serpentine rock is chrysotile, which is naturally occurring asbestos.[3] Please see the discussion under Checklist topic 16,

---

[3] California Department of Conservation, California Geological Survey. 2002. *Note 14 Serpentine California State Rock*. Online at http://www.consrv.ca.gov/cgs/information/publications/cgs_notes/note_14/Documents/note_14.pdf. Accessed January 26, 2010. "Serpentine rock is primarily composed of one or more of the three magnesium silicate minerals: lizardite, chrysotile and antigorite. Chrysotile often occurs as fibrous veinlets in serpentine. Chrysotile in fibrous form is the most common type of asbestos."

Hazardous Materials. In addition, underpinning may be required at the southeast corner of the existing building to protect the adjacent structure during excavation.

Planning Code Section 143 requires new building construction to include one street tree for every 20 feet of frontage of the property; the project site, with a 26-foot frontage, would plant one street tree.

Project construction is estimated to take 15 months with a construction cost of approximately $800,000. Construction is anticipated to begin in early 2011, with occupancy in early to mid-2012. The project sponsors and developers are Mike and Diane Susoev, and the project architect is Ewald Tajbaksh Architecture.

Required Approvals

- Approval of a variance from *Planning Code* Section 134 to encroach into the required rear yard.
- The proposed project would require Discretionary Review by the Planning Commission for residential demolition.
- Approval by the Planning Department of building permits for residential demolition and new construction.
- A hearing before the Historic Preservation Commission for formal comments on the Draft EIR as well as to fulfill Interim Permit Review Procedures for projects involving Historic Resources in the Eastern Neighborhoods Community Plan areas.
- Approval by the Department of Building Inspection for demolition and site permits.
- Approval by the Bureau of Streets and Mapping of the Department of Public Works for street and sidewalk permits.
- Approval by the San Francisco Municipal Transportation Agency (SFMTA) for any curb or road modifications.

B. PROJECT SETTING

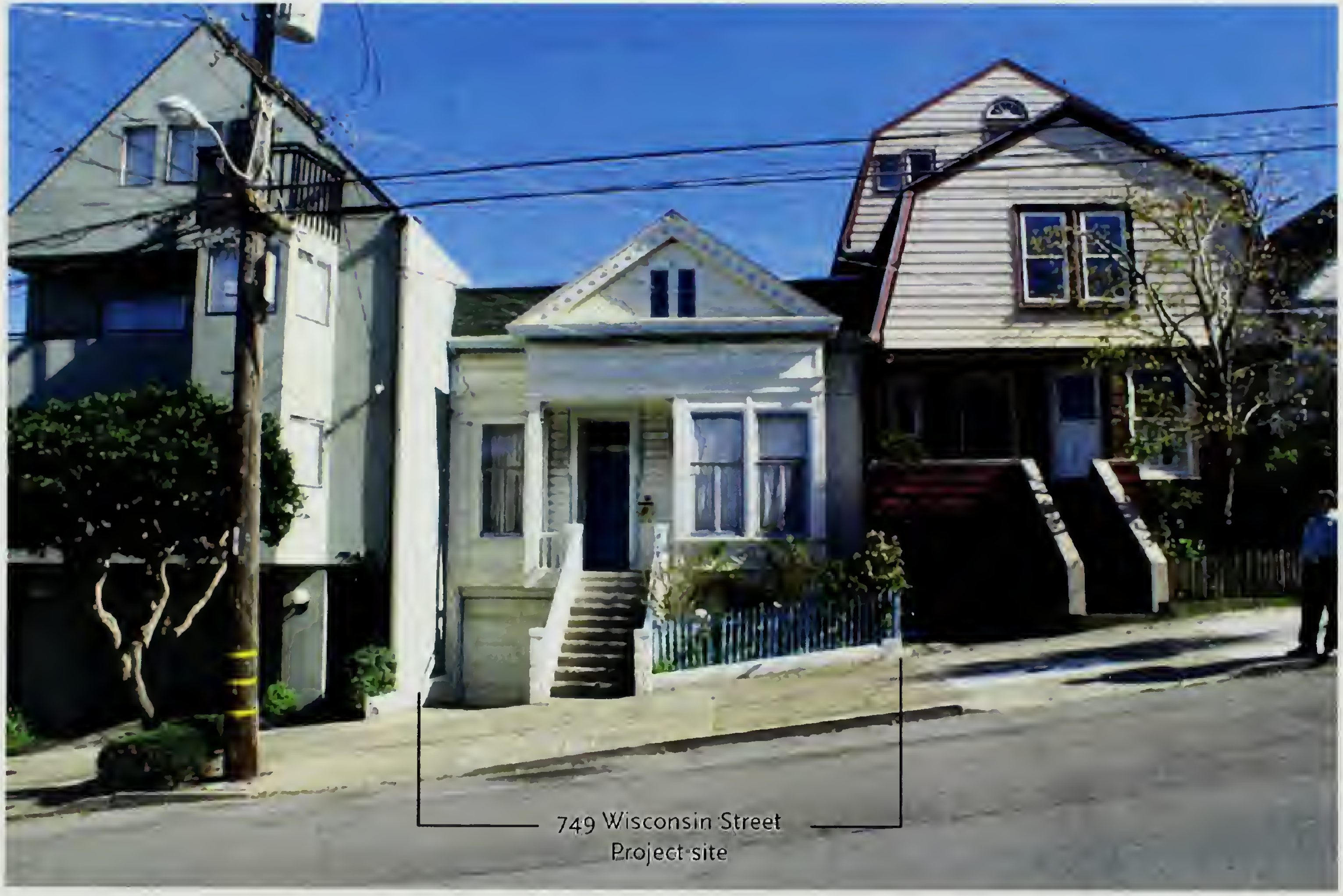
The project site is located in the Potrero Hill neighborhood of San Francisco, approximately 0.25 miles east of Highway 101, 0.35 miles west of Highway 280, and 0.6 miles north of Cesar Chavez Street. The project vicinity (bounded by 20th Street [north], Carolina Street [west], 23rd Street [south] and Arkansas Street [east]) is described below.

The project site faces west onto Wisconsin Street south of 20th Street and north of 22nd Street. Figure 8, page 14, presents a view of the site from Wisconsin Street. Twentieth Street to the north includes an overpass over Highway 280 to the east of the project site. Twentieth Street terminates to the west prior to crossing Highway 101. To the south, 23rd Street provides access to the west over Highway 101, but does not continue eastbound over Highway 280. The nearest Highway 101 access is from the Cesar Chavez Street on- and off-ramps approximately 0.6 miles to the southwest. Wisconsin Street does not continue to Cesar Chavez Street to the south; instead, Rhode Island, Kansas, and Vermont Streets, three, four and five blocks to the west respectively, provide the main north-south access for the project vicinity.

Cesar Chavez Street also provides on- and off-ramp access to Highway 280, approximately 0.7 miles to the southeast. Mariposa Street, approximately four blocks to the north, also provides an off-ramp from northbound Highway 101. Wisconsin, Carolina, Arkansas, 22nd and 23rd Streets occasionally terminate and restart, therefore, none are thoroughfares and are utilized mainly by local traffic. This reflects the residential nature of the project block and vicinity. Cesar Chavez Street, a Major Arterial Street 0.6 miles to the south, is the only *General Plan* designated street in the project area.

The nearest Caltrain line runs along Highway 280, approximately 0.35 miles to the east. Also 0.35 miles to the east, the 22nd Street Caltrain Station sits at the intersection of 22nd Street and Highway 280 and is the nearest Caltrain station to the project site. The SFMTA operates many bus lines in the project vicinity, the closest of which are the 10-Townsend line, which runs along the project block on Wisconsin Street and the 19-Polk line along De Haro Street, two blocks from the project site. Other bus lines in the vicinity of the project site include the 22-Fillmore, at 18th and Connecticut Streets, approximately six blocks from the site, the 48-Quintara at 23rd and Kansas Streets, approximately seven blocks from the site, and the 9-San Bruno Avenue line along Potrero Street, approximately eight blocks from the project site. SFMTA also operates the T-Third Street Muni streetcar line through the station at 23rd and 3rd Streets, approximately 0.6 miles to the northeast.

The 2,596-square-foot project site faces west onto Wisconsin Street. It is bordered to the north by a four-story sloped-roof wood-sided Italianate duplex that rises approximately 40 feet above the sidewalk and



Source: Page & Turnbull

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View of the Project Site Figure 8

to the south by a four-story farmhouse-style single-family home that stands approximately 40 feet above the sidewalk. The existing structure at 749 Wisconsin Street was built of wood-frame construction and rendered in a modified Italianate style with Eastlake influences, a style common in the area.

The project block is currently developed with residential uses featuring a combination of single-family and duplex homes, with an occasional three- to five-unit apartment complex. Structures are two to four stories tall, include ground-level enclosed parking garages, and are generally set close to the sidewalk. Only a few properties have front yard setbacks. Properties that include significant setbacks also feature extensive front landscaping providing screened views and an occasional green "break" in the midst of the urban views down Wisconsin Street along the project block. The project block and vicinity contain a mix of styles that include simplified Victorian and wood-sided Italianate with an occasional farmhouse, cottage, modern, or colonial-style structure with most homes built flush to neighboring structures. Street trees are interspersed along the project block at a ratio of approximately two for every three properties.

The northeast corner of the project block contains the only commercial use – the Michael Gary & Co. hair salon, which is housed in a small, one-story corner structure. The northwest corner of the project block contains a large two- to three-story single-family residence with a large yard and pool, which are not visible from the street. This property is landscaped on its perimeter, obscuring many views of the home itself.

One block to the west and immediately south of 20th Street, Carolina Street consists mainly of duplexes and triplexes, smaller single-family dwellings, and a handful of four-story, approximately 8-10 unit apartment complexes. A large rock outcrop just south of 20th Street forces many of the homes on the west side to be set back approximately 20-50 feet from the street with long, winding stairways connecting pedestrian entrances to the street and parking. The rock outcrop also allows for a large amount of native landscaping in sections of the block, featuring mature oaks, pines, and native shrubs and brush. Further south and closer to 22nd Street, many of the homes are built with little or no setback from the street.

The north end of the block bounded by Carolina Street (west), 22nd Street (north), and Wisconsin Street (east) contains a large water storage tower built on a level rocky plateau. This storage tank is surrounded by moderately mature street trees and a 10-foot wood-framed wire mesh fence that slightly screens street views and sits flush with the sidewalk. Beyond the fence, the low hillside is visible with sharp rock outcrops and scrub growth including grasses, ivy, and one fully mature native conifer tree.

South of 22nd Street, Carolina Street is bisected by an approximately 15-foot-wide center median with a variety of landscaping and vegetation including mature coniferous and deciduous trees, 3- to 5-foot hedges and shrubs, and scrub growth which serves as a visual and physical divider. Carolina Street slopes sharply downward to the south and west between 22nd and 23rd Streets. The slope is sharp enough to require a retaining wall running along the center median from the middle of the block through the intersection of Carolina Street and 23rd Street, breaking 23rd Street into a non-continuous street for vehicles. At its maximum, the grade difference between the east and west sides of the street are approximately 10 feet, shielding views from the west to the east.

South of 23rd Street, Carolina Street slopes gently upwards to the south, and features a large expanse of undeveloped grassy hillside extending approximately 50 feet from the street, providing some moderate views of the nearby homes and structures to the south, as well as a limited vista of more distant areas to the south.

Twenty-third Street slopes sharply upwards east of Carolina Street, and dead ends in a cul-de-sac, separated from Wisconsin Street vehicular traffic by a 12-foot grade-retaining landscaped slope. The homes along 23rd Street are consistent with the mix of styles, sizes, and uses established along Carolina Street; they are mainly 2-3 story wood-sided Italianate multi-unit apartment complexes interspersed with single-family homes, duplexes, and triplexes. There are no street trees, and only two to three established yard trees.

Wisconsin Street south of the project site contains the same mix and styles of single-family, duplex, and occasional triplex structures. The northwest corner of the intersection of 22nd and Wisconsin Streets features a three-story brick Italianate firehouse that sits directly across 22nd Street from the water storage tank.

Like Carolina Street, Wisconsin Street slopes downward to the north, framing a picturesque view of downtown San Francisco for northbound drivers. In the opposite direction, to the south, Wisconsin Street slopes upwards. Street trees are more prevalent on the east side, and there are only a few properties that are set back and feature intensive landscaping. The west side of the street is dominated by the water storage tank. Madera Street, running between Wisconsin and Arkansas Streets, is built with houses similar in scale and style to Wisconsin Street.

After peaking at Madera Street, Wisconsin Street slopes downward to the south and provides vistas of the distant southern hills and urban development. Beyond 23rd Street, the southern end of the project area, Wisconsin Street runs alongside the western edge of Potrero Terrace, a 469-unit post-war barrack-style public housing complex under the authority of the City of San Francisco Housing Authority. Wisconsin Street terminates at 26th Street and does not proceed through to Cesar Chavez Street; therefore, it does not carry a significant amount of north-south through traffic.

At the south end of the project area and east of Wisconsin Street, 23rd Street continues sloping gently upwards. The south side of the street contains a sharply sloped undeveloped grassy lot which marks the northern boundary of Potrero Terrace, while the north side of the street is filled with two identically-styled three-story simplified Victorian apartment complexes which run the full block to Arkansas Street. These two complexes contain approximately 20-30 units total, and feature ground-level garage parking.

One block east of Wisconsin Street, Arkansas Street runs from 23rd Street north to 19th Street. North of 23rd Street, Arkansas Street is bounded on the east by the Potrero Hill Recreation Center (PHRC), an 11-acre park that features a Quonset-hut enclosed basketball court, multiple playgrounds, and open space. The southern portion of the PHRC's western edge (Arkansas Street) is enclosed with a six-foot cyclone fence, while the northern portion is landscaped with green hedges, shrubs, and grasses. The northern border of the PHRC contains a row of approximately 30-foot coniferous trees. North of the PHRC to 20th Street, Arkansas Street contains a mix of housing similar in appearance and scale to Wisconsin Street. Arkansas Street, like Wisconsin Street, slopes downward to the north, highlighting views of downtown San Francisco. The south side of 20th Street east of Arkansas Street contains a small neighborhood commercial district which features two small markets, a café, and a handful of assorted office and retail locations.

The project site is not located within a special use district or preservation district. However, the building on the project site is a contributor to a California Register-eligible potential historic district with a period of significance from the 1880s to the 1910s. In addition to the project site, there are eight other buildings in the project block that are included in the Planning Department's 1976 Architectural Survey and may contribute to the potential historic district: 617 Wisconsin Street, 627 Wisconsin Street, 629 Wisconsin Street, 631 Wisconsin Street, 731 Wisconsin Street, 743 Wisconsin Street, 612 Arkansas Street, and 626 Arkansas Street.

The project site is in a Residential, House, Two-Family (RH-2) use district as governed by Section 206.1 of the City of San Francisco *Planning Code*. The RH-2 district is defined as "devoted to one-family and two-family houses, with the latter commonly consisting of two large flats, one occupied by the owner and the other available for rental. Structures are finely scaled and usually do not exceed 25 feet in width or 40 feet in height. Building styles are often more varied than in single-family areas, but certain streets and tracts are quite uniform. Considerable ground-level open space is available, and it frequently is private for each unit. The districts may have easy access to shopping facilities and transit lines. In some cases, group housing and institutions are found in these areas, although nonresidential uses tend to be quite limited."[4] Most of the project vicinity is also zoned RH-2, with small pockets zoned NC-1 or NC-2 (Neighborhood Commercial), P (Public), and RM-1 (Residential, Mixed, Low-density). Some triplexes and larger apartment complexes exist within the RH-2 use district; it is assumed these are subject to variances or existed prior to the current use designation.

The Eastern Neighborhoods Area Plans and Rezoning, including the *Showplace Square/Potrero Hill Area Plan,* have been adopted by the Board of Supervisors and signed by the Mayor, with an effective date of January 19, 2009. The *Showplace Square/Potrero Hill Area Plan* (the Plan) encompasses the entire Potrero Hill residential neighborhood, including the project site. The *Plan* contains no zoning or height and bulk district changes for the project site.

The project site is located in a 40-X height and bulk district, which permits structures up to a height of 40 feet, with no height or bulk limits. The 40-X height and bulk district extends for approximately 0.5 to 1.5 miles in all directions around the project site, providing a uniform maximum height of 40 feet for most of the area. The water tower at 22nd and Wisconsin Streets and the PHRC are in the OS (Open Space) height and bulk district, a designation that represents the only non-40-X district in the project vicinity.

* * *

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[4] City and County of San Francisco, *San Francisco Planning Code,* Section 206.1, RH (Residential, House) Districts. Available online at http://www.municode.com/Resources/gateway.asp?pid=14139&sid=5, accessed May 22, 2009.

C. COMPATIBILITY WITH ZONING, PLANS, AND POLICIES

	Applicable	*Not Applicable*
Discuss any variances, special authorizations, or changes proposed to the *Planning Code* or Zoning Map, if applicable.	☒	☐
Discuss any conflicts with any adopted plans and goals of the City or Region, if applicable.	☒	☐
Discuss any approvals and/or permits from City departments other than the Planning Department or the Department of Building Inspection, or from Regional, State, or Federal Agencies.	☒	☐

San Francisco Planning Code

The *San Francisco Planning Code (Planning Code),* which incorporates by reference the City's Zoning Maps, governs permitted uses, densities, and configuration of buildings within San Francisco. Permits to construct new buildings (or to alter or demolish existing ones) may not be issued unless the proposed project conforms to the *Planning Code,* an exception is granted pursuant to provisions of the *Planning Code,* or a reclassification of the site occurs.

The project site is zoned RH-2 (Residential, House, Two Family). The proposed two-unit residential building is a principally permitted use in a RH-2 district (Section 209.1). The allowable residential density in the RH-2 district is two single-family dwelling units per lot (Section 209.1). The project's two proposed housing units would be within the allowable density controls of the *Planning Code* for this use district.

The usable open space requirement for the RH-2 district (Section 135) is 125 square feet per dwelling unit if private, plus one-third more for any portion of usable open space that is common. The proposed two units would require 250 square feet of private open space (2 units x 125 square feet per unit = 250 square feet), or 333 square feet of common open space (2 units x 125 square feet per unit x 1.33 = 333 square feet). The project would contain approximately 620 square feet of common open space, and about 1,045 square feet of private open space for the Unit 2 residents. Therefore, the project would meet the open space requirement for the district.

The rear yard requirement for the RH-2 district is 45 percent of the total depth of the lot (Section 134.a.2), or the average of the depth of the two adjacent rear yards (Section 134.c), whichever is less. At the project site, the allowable rear yard based on the average of the yards provided for the adjacent buildings is 34 feet, two inches from the rear property line (less than 45 percent of the lot). According to Section 136.c.25, a single-story extension is allowed to encroach up to 12 feet into the required rear yard, as long as it does not occupy any space within the rear 25 percent of the lot, or within the rear 15 feet of the depth of the lot, whichever is greater. In addition, this extension is required to be set in five feet along the sides of the extension. The first floor of the proposed project would extend nine feet, two inches into the rear yard. This single-story extension is less than 12 feet, and would not occupy any space within the rear 25 percent of the lot or the rear 15 feet of the lot. However, it is not set in five feet along the sides. Therefore, the proposed project would require a variance from the rear yard requirement for the RH-2 district. The project site is located within the recently-approved *Showplace Square/Potrero Hill Plan Area*, which is located south of SoMa and east of the Mission district, within an irregularly shaped boundary, as shown in Figure 9, page 21. The *Showplace Square/Potrero Hill Area Plan* does not include any zoning or height and bulk district changes for the project site, and is intended to preserve and strengthen the existing physical fabric and character of the Potrero Hill neighborhood.

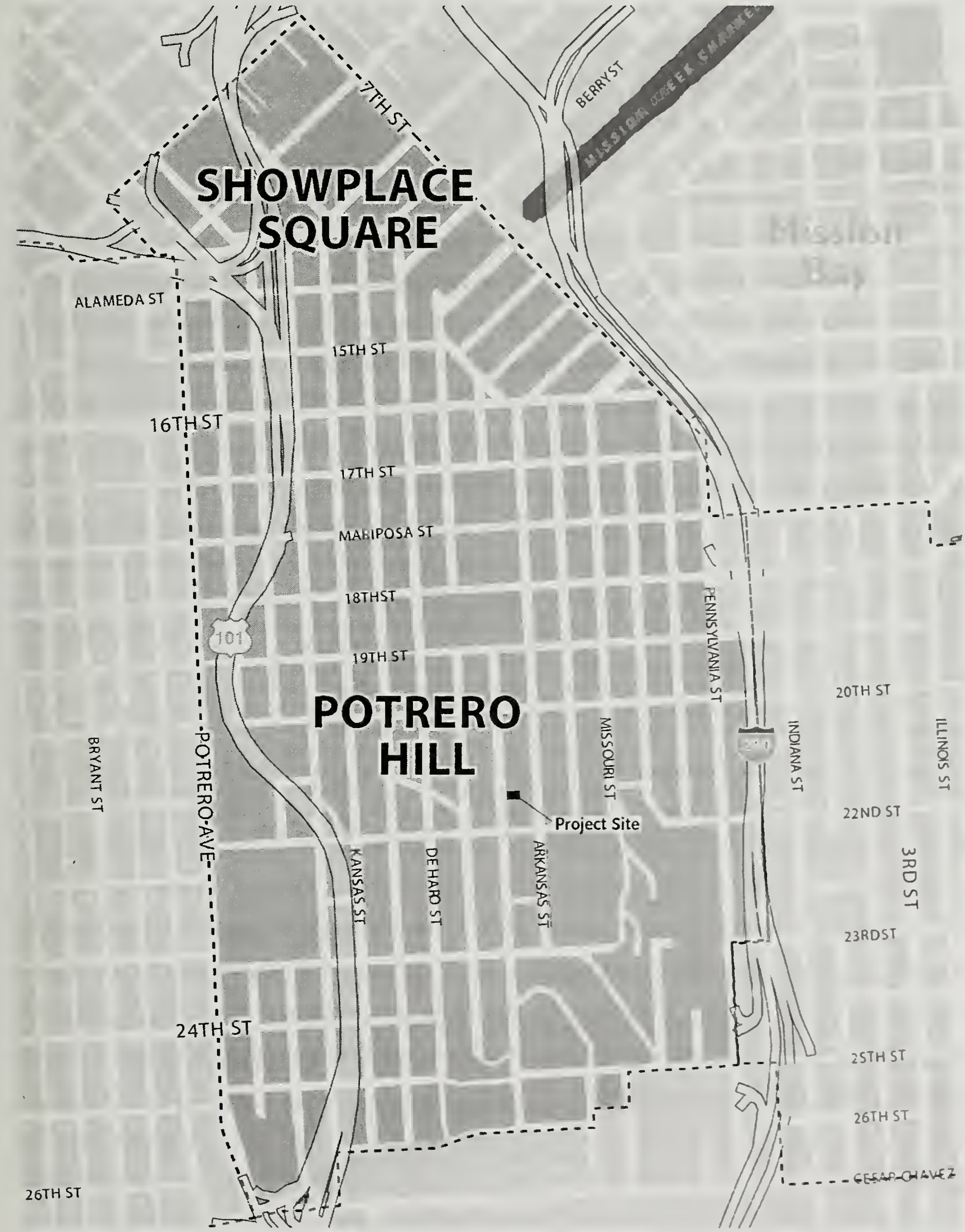
Required Approvals

The project would require discretionary review by the Planning Commission for demolition of a residential building, approval by the Planning Department of the building permits for residential demolition and new construction, approval by the Planning Department of a variance from *Planning Code* Section 134 for the required rear yard, approval by the Department of Building Inspection for demolition and building permits; approval by the Bureau of Streets and Mapping of the Department of Public Works for street and sidewalk permits, and approval by the SFMTA for any curb or road modifications.

Plans and Policies

San Francisco General Plan

The San Francisco *General Plan*, which provides general policies and objectives to guide land use decisions, contains some policies that relate to physical environmental issues. The compatibility of the project with *General Plan* policies that do not relate to physical environmental issues will be considered by decision-makers as part of their decision whether to approve or disapprove the proposed project and any potential conflicts identified as part of that process would not alter the physical environmental effects of the proposed project.



Source: San Francisco Planning Department, April 2008

3-15-10

Showplace Square/Potrero Hill Plan Area Figure 9

Proposition M

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative, which added Section 101.1 to the City's *Planning Code* to establish eight Priority Policies. These policies, and the sections of this Environmental Evaluation addressing the environmental issues associated with the policies, are: (1) preservation and enhancement of neighborhood-serving retail uses; (2) protection of neighborhood character (Question 1c, Land Use); (3) preservation and enhancement of affordable housing (Question 3b, Population and Housing, with regard to housing supply and displacement issues); (4) discouragement of commuter automobiles (Questions 5a, b, f, and g, Transportation and Circulation); (5) protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership (Question 1c, Land Use); (6) maximization of earthquake preparedness (Questions 14 a-d, Geology, Soils, and Seismicity); (7) landmark and historic building preservation (Question 4a, Cultural Resources); and (8) protection of open space (Questions 9a and b, Wind and Shadow, and Questions 10a and c, Recreation and Public Space). Prior to issuing a permit for any project which requires an Initial Study under the California Environmental Quality Act (CEQA), and prior to issuing a permit for any demolition, conversion, or change of use, and prior to taking any action which requires a finding of consistency with the *General Plan*, the City is required to find that the proposed project or legislation is consistent with the Priority Policies. As noted above, the consistency of the proposed project with the environmental topics associated with the Priority Policies is discussed in the Evaluation of Environmental Effects, providing information for use in the case report for the proposed project. The proposed project would result in the demolition of a building which has been determined to be an historic resource for the purpose of CEQA. The subject building has been determined to be a contributor to a California Register-eligible potential historic district. Therefore, the proposed project conflicts with Priority Policy 7, Landmark and Historic Building Preservation. The potential adverse effects to historic resources that may result from the proposed project are discussed under Checklist topic 4, Cultural and Paleontological Resources. This issue will be further analyzed in the EIR. The case report and approval motions for the project will contain the Department's comprehensive project analysis and findings regarding consistency of the proposed project with the Priority Policies.

D. SUMMARY OF ENVIRONMENTAL EFFECTS

The proposed project could potentially affect ("Potentially Significant Impact" or "Less than Significant with Mitigation Incorporated") the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental topic.

☐ Land Use
☐ Aesthetics
☐ Population and Housing
☒ Cultural Resources
☐ Transportation and Circulation
☐ Noise
☐ Air Quality
☐ Greenhouse Gas Emissions
☐ Wind and Shadow
☐ Recreation
☐ Utilities and Service Systems
☐ Public Services
☐ Biological Resources
☐ Geology and Soils
☐ Hydrology and Water Quality
☒ Hazards/Hazardous Materials
☐ Mineral/Energy Resources
☐ Agriculture and Forest Resources
☒ Mandatory Findings of Significance

1. Effects Found to be Potentially Significant

Topics noted as "Potentially Significant Impact" will be further evaluated in the EIR assessment to determine whether a significant impact would occur. The proposed project would demolish the existing residence on the site, which has been determined to be an historical resource for the purpose of CEQA. Therefore, the proposed project would have a significant, adverse impact on historical resources, both on the structure itself, and on a California Register-eligible historic district. This topic will be discussed in the EIR. The EIR may provide a discussion of other topics such as project-specific aesthetics and land use, which are determined in this Initial Study not to be significant, but will be included in the EIR for informational purposes.

2. Effects Found Not to be Significant

The following potential individual and cumulative environmental effects of the proposed project have been determined either to be less than significant or to be reduced to a less-than-significant level through mitigation measures included in this Initial Study: land use, aesthetics, population and housing, archeological and paleontological resources, transportation and circulation, noise, air quality, greenhouse gas emissions, wind and shadow, recreation, utilities and service systems, public services, biological resources, geology and soils, hydrology and water quality, hazards and hazardous materials, mineral and energy resources, and agricultural resources. These topics are discussed with recommended mitigation measures, where appropriate, in Section E, and require no further environmental analysis in the EIR. The mitigation measures identified for archeological resources (**Mitigation Measure M-CP-1, page 35**) and hazardous materials (**Mitigation Measure M-HZ-1, page 91,** and **M-HZ-2, page 92**) have been agreed to by the project sponsor and will be incorporated into the proposed project.

E. EVALUATION OF ENVIRONMENTAL EFFECTS

Except for the category of historic resources, the items on the Initial Study Environmental Evaluation Checklist have been checked either "*Not Applicable,*" "*No Impact,*" "*Less Than Significant,*" or "*Less Than Significant with Mitigation Incorporated.*" These categories indicate that, upon evaluation, staff has determined that the proposed project could not have a significant adverse environmental effect in relation to these items. For items where the conclusion is "*Potentially Significant Impact,*" the analysis will be included in the EIR. For Checklist items checked other than "*Not Applicable,*" the Initial Study discusses that particular issue. For all of the items checked "*Not Applicable,*" the conclusions regarding potential significant adverse environmental effects are based on field observation, staff and consultant experience and expertise on similar projects, and/or standard reference material available within the Planning Department, such as the Department's *Transportation Guidelines for Environmental Review,* or the California Natural Diversity Data Base and maps, published by the California Department of Fish and Game. For each Checklist topic, the evaluation has considered both the individual and cumulative impacts of the proposed project.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
1. **LAND USE AND LAND USE PLANNING—** Would the project:					
a) Physically divide an established community?	☐	☐	☐	☒	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒		☐
c) Have a substantial impact upon the existing character of the vicinity?	☐	☐	☒	☐	☐

The rectangular, 2,596-square-foot project site is located on the east side of Wisconsin Street between 20th Street and 22nd Street in the Potrero Hill area of San Francisco. The project site is currently occupied by a vacant one-story residence containing approximately 1,617 square feet of living space plus 969 square feet of parking. Land uses in the vicinity are almost exclusively residential with small pockets of neighborhood commercial uses to the northeast, and the Potrero Hill Recreation Center (PHRC) approximately two blocks to the southeast. Heights on the project block and in the project vicinity are consistently between one and four stories, and the vast majority of buildings are duplex and triplex structures between two and four stories. The project site is occupied by a one-story single-family home, and is bound on the north by a four-story duplex, and on the south by a four-story single-family home.

The proposed project would continue the existing residential land use on the project site. While the proposed project would result in an increased amount of building area on the site, it would not cause a significant adverse land use impact. The project would be constructed within the existing lot configuration, and it would not physically divide the arrangement of existing uses and activities that surround it. The proposed four-story building would be in character with the surrounding area's one-to four-story multi-family residential buildings, and the scale and massing of the proposed building would be similar to and consistent with that of the buildings in the immediate vicinity.

The proposed project would be compatible with the dense, urban, residential character of the project vicinity. The project would replace an existing residential building with a larger residential building. The proposed project would not introduce new land uses to the project vicinity, since multi-family residential uses are already present. Although the proposed project would construct a two-unit building in place of a single-family home, it would be compatible with the existing residential character of the Wisconsin Street corridor in the project vicinity and the size, character, and uses of existing structures in the area. Therefore, in terms of land use the proposed project would not have a substantial effect upon the land use character of the area.

The proposed building height in the context of the surrounding development is discussed further under the topic of Aesthetics, below. Land use plans and policies are those which directly address physical environmental issues and/or contain targets or standards which must be met in order to preserve or improve characteristics of San Francisco's physical environment.

For the reasons stated above, the land use impacts of the proposed project would be less than significant under CEQA.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
2. AESTHETICS—Would the project:					
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment which contribute to a scenic public setting?	☐	☐	☒	☐	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties?	☐	☐	☒	☐	☐

Scenic Vistas

The topography of the project area and surrounding urban development limit public views of other parts of the city to narrow segments of the downtown skyline (north) and the Bay View District urban area (south) visible along the corridors of north-south oriented streets such as Wisconsin, Carolina, and Arkansas Streets, and occasional views of the bay to the west along the corridors of some east-west streets such as 22nd Street. Views to the west are screened along Wisconsin Street by existing surrounding urban development. The proposed project would be built within the existing street pattern and would not be expected to substantially degrade or obstruct any public scenic views or vistas; therefore, this impact would be less than significant.

Additionally, the proposed project would not damage any public scenic resources, such as trees, or other features that contribute to a scenic public setting because there are no such resources within view of the public right-of-way on the project site.

Private Views

The proposed project would be not be visible from the street-facing windows of the residential buildings in the project block on the east side of Wisconsin Street, but would be visible from a limited number of windows on the west side of Wisconsin Street. From these private residences, some views west towards San Francisco Bay that currently exist over the roofline of the existing one-story structure may be slightly obscured by the proposed project because of the proposed change in height from 27 feet to 40 feet. The project site is bordered on both the north and the south by approximately 40-foot tall buildings that currently screen existing private views to the west, and the existing structure screens existing views to the west from lower vantage points. The proposed project would not substantially change views of the existing skyline because existing buildings already screen most of the field of view that would be occupied by the proposed project. Nevertheless, the reduced private views would be an undesirable change for those individuals whose views would be blocked by the proposed building. However, reductions or alterations of private views that would be created by this project are a typical outcome in an urban setting. Therefore, the change in private views would be considered a less-than-significant impact.

Visual Character

Design and aesthetics are, by definition, subjective and open to interpretation by decision-makers and members of the public. A proposed project would be considered to have a significant adverse effect on visual quality under CEQA only if it would cause a substantial and demonstrable negative change in the visual character or quality of the area.

The project vicinity is occupied by low-rise residential buildings (one to four stories) with neighborhood commercial uses along 20th Street to the northwest and the PHRC to the southeast. Buildings with an early twentieth century design character predominate, and most are rectilinear in character, built to the lot lines, and two to four stories in height. Wood and stucco-sided Italianates and simplified Victorians are most common, with frequent occurrences of other architectural styles including farmhouse, cottage, modern, or colonial-style structure. As with many San Francisco neighborhoods, most homes are built flush to neighboring structures. Street trees are interspersed along the project block at a ratio of approximately two for every three properties. The proposed project façade would be in a modern glass, concrete and steel design with clean, rectilinear lines. While some structures in the project vicinity are constructed in more traditional styles, the proposed project is consistent with the rectilinear lines of the simple Italianate and modern styles common in the project vicinity. The proposed project would not be particularly prominent or aesthetically inconsistent with the visual character of the existing neighborhood.

The project would change the visual character of the project site, by replacing the site's one-story, 27-foot-tall single-family home with a four-story, 40-foot-tall residential building. The proposed project, at four stories, would be visible along the adjacent segment of Wisconsin Street, and would present height, form, and massing similar to the modern-style four-story multi-family residential building immediately north of the project site, the four-story farmhouse-style building immediately to the south, and to many other buildings of similar size and scale in the area. The proposed project would not be the largest building in the vicinity, and would be within the height limit established by the height and bulk ordinance. Intervening buildings would screen most views of the project at other street-level vantage points, including public sidewalks. While intensifying the use on the project site, the proposed project would not add a new or visually inconsistent presence to the area. For these reasons, the proposed project would not be expected to cause a substantial and demonstrable negative change or disruption to the existing visual character of the project vicinity. The proposed project's environmental effect on aesthetics and urban design would be less than significant. In addition, when considered together with the established style of contemporary and older buildings in the area, the project would not contribute to a visual environment that would be inconsistent with the existing mixed urban setting of the area. Therefore, the proposed project would not result in a cumulative significant impact on the visual character of the area.

For all of the above reasons, the proposed project would not be expected to cause a substantial and demonstrable negative change, or disrupt the existing visual character of the project vicinity.

Light and Glare

The project site is currently occupied by a one-story single-family house. The proposed project would construct a four-story, 40-foot-tall residential building. Project lighting visible from exterior vantage points would consist of interior lighting of the residential lobby and garage entrance on the ground floor, and interior lighting of the residential units on all floors. The project's lighting would be consistent with exterior lighting typical of other residential buildings in the project vicinity. The project would comply with Planning Commission Resolution 9212, which prohibits the use of mirrored or reflective glass. Mirrored glass would not be used in the new building. Exterior lighting would be consistent with similar lighting on surrounding land uses, and the fixtures would be directed downward to minimize visible light on and off the project site. For these reasons, the proposed project would not generate obtrusive light or glare that would substantially impact other properties. Light and glare would not be considered a significant impact of the project.

Based on the above analysis and discussion, the proposed project would not result in substantial, adverse effects on visual quality or aesthetics, and the project impact would be less than significant.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
3. **POPULATION AND HOUSING—** Would the project:					
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐	☐
b) Displace substantial numbers of existing housing units or create demand for additional housing, necessitating the construction of replacement housing?	☐	☐	☒	☐	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	☐

In general, a project would be considered growth-inducing if its implementation would result in substantial population increases and/or new development that might not occur if the project were not approved and implemented. The proposed new building would be infill development consisting of a two-unit residential building. The proposed building would be located in an urbanized area and would not be expected to substantially alter existing development patterns in the Potrero Hill area or in San Francisco as a whole. The proposed project would replace a vacant single-family residence with a two-unit residential building, adding one housing unit to San Francisco's building stock. Using the average household occupancy rate of 1.83 persons per household for Census Tract 227.01, in which the project site is located, the proposed project would accommodate approximately four residents.[5]

The allowable residential density in the RH-2 use district is two one-family dwelling units per lot (Section 209.1). With two proposed housing units, the proposed project would be within the density controls of the *Planning Code*. The growth associated with the proposed project is anticipated in the *General Plan*, and the proposed project would not induce substantial growth or an unsupported concentration of people in the Potrero Hill area on an individual or cumulative level. Therefore, the proposed project is within the *Planning Code* and zoning parameters controlling development and associated population and employment growth on the project site.

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[5] Table QT-H3 Household Population and Household Type by Tenure Census 2000 Summary File. Census Tract 227.01, San Francisco County, California. Available online at: http://www.factfinder.census.gov/servlet/QTTable?_bm=y&-state=qt&-context=qt&-qr_name=DEC_2000_SF1_U_QTH3&-ds_name=D&-CONTEXT=qt&-tree_id=4001&-redoLog=false&-all_geo_types=N&-geo_id=14000US06075022701&-search_results=01000US&-format=&-_lang=en, accessed May 22, 2009.

San Francisco consistently ranks as one of the most expensive housing markets in the United States. It is a central city in an attractive region known for its agreeable climate, open space, recreational opportunities, cultural amenities, a strong and diverse economy, and prominent educational institutions. As a regional employment center, San Francisco attracts people who want to live close to where they work. These factors continue to support strong housing demand in the City. The provision of new housing to meet this strong demand is particularly difficult because the amount of land available for residential development is limited, and because land and development costs are high.

The U.S. Census estimated the year 2000 population of San Francisco at 776,733.[6] Corresponding year estimates from the San Francisco Planning Department for year 2000 households and employment are 329,700 and 634,430, respectively.[7] The Planning Department projects that San Francisco total population, households, and jobs will be approximately 808,700, 348,330, and 593,370, respectively, by year 2010 and about 922,600, 386,680, and 782,560, respectively, by 2030.[8] Annual housing production in the City during the period 1989-2008 ranged from a low of about 288 units (1993) to a high of about 3,263 units (2008) per year, an annual average of 1,577 units.[9] In May 2008, the Association of Bay Area Governments (ABAG) projected the Bay Area's need for housing based on their Regional Housing Needs Determination (RHND) 2007-2014 allocation. The ABAG study estimated the jurisdictional need of the City as 31,193 dwelling units (rounded to 32,000), or an average yearly need of 4,000 new dwelling units.[10] Based on the information in the previous paragraph, the Planning Department expects an increase of 38,350 households between 2010 and 2030. The proposed one additional residential unit would help accommodate part of this need.

The proposed net increase of one market-rate housing unit would be less than 0.1 percent of the average annual housing production in San Francisco from 1993-2003 (1,540 units), and approximately 0.025 percent of San Francisco's annual production need estimated by ABAG. The existing residential unit at the proposed project site is vacant and would be replaced by the project; therefore, the proposed project would not displace residential units or residents, or necessitate the construction of housing units elsewhere.

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[6] U.S. Census, State and County Quick Facts, http://quickfacts.census.gov/qfd/states/06/06075.html. San Francisco Planning Department, Draft Housing Element of the San Francisco General Plan, Part 1: Data and Needs Analysis, p. 4, Table I-1.

[7] San Francisco Planning Department, Draft Housing Element of the San Francisco General Plan, Part 1: Data and Needs Analysis, April 2009, p. 4, Table I-1 for households, and p. 12, Table I-8, for jobs.

[8] Ibid.

[9] San Francisco Planning Department, San Francisco Housing Inventory 2008, April 2009, p.6, Table 2, San Francisco Housing Trends, 1989-2008.

[10] Association of Bay Area Governments, Final Regional Housing Needs Allocation, Adopted May 15, 2008, www.abag.ca.gov/planning/housingneeds/pdfs/Final_RHNA.pdf. Additional information regarding ABAG's 2007-2014 Regional Housing Needs Determination can be found at www.abag.ca.gov/planning/housingneeds.

As mentioned above, San Francisco consistently ranks as one of the most expensive housing markets in the United States, and there is a shortage of affordable housing in the City; however, this deficit is an existing condition. With only two units, the project would not be subject to the City's Inclusionary Affordable Housing Program (*Planning Code*, Sections 315 et seq.). The development of one additional market-rate residential unit would not create an adverse cumulative impact related to a citywide shortfall in affordable housing.

Although the proposed project would increase the population on the site, this increase would not be considered substantial, for the reasons discussed above. Therefore, the impact on population would not be considered a significant effect, nor would the project contribute to any potential cumulative effects related to population, as the project would not result in displacement or create unmet housing demand.

Based on the above analysis, no significant physical environmental effects on housing demand or population would occur due to the proposed project.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
4. CULTURAL AND PALEONTOLOGICAL RESOURCES— Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco *Planning Code*?	☒	☐	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?	☐	☒	☐	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒	☐

Historic Architectural Resources

Early records of the project site contain inconsistent dating. San Francisco Planning Department records indicate that the site was originally developed in 1904 for owner Patrick Quinn by architect and builder Harry Law; however, San Francisco Water Department records show a service connection established as early as 1898, and the 1900 Sanborn Fire map shows a structure at 667 Wisconsin Street that appears to match the location and footprint of the existing structure. A 1908 Building Permit issued for Patrick Quinn shows construction of a 14 x 25-foot, 16-foot-tall frame building, further obscuring the structure's origin.[11]

Regardless of its origin, the structure on the project site is listed in the 1976 Architectural Survey.[12] It is not listed in the National or California Register of Historic Places. The structure may be a historic resource under CEQA if it meets certain requirements for listing. CEQA allows the Planning Department, as the lead agency, to make a determination that a property is historically significant, if the resource meets the criteria for listing on the California Register (CEQA Section 21084.1 and CEQA Guidelines 15064.5).

The Planning Department analyzed the property and prepared a Historic Resource Evaluation Response (HRER), the findings of which are included below.[13]

California Register Criteria

The HRER indicates that the building meets the California Register criteria of Event, Architecture, and District or Context, and notes that the building is a contributor to a California Register-eligible potential historic district. Therefore, the existing structure has been determined to be an historic resource for the purpose of CEQA. The HRER recommends further investigation to determine whether the property meets the Information Potential criterion.

During the late 1800s and the early 1900s, the Potrero Hill neighborhood was the seam, visually represented in the neighborhood's topography, between the Mission and the Central Waterfront. During the 1880s to 1910s, the outer Mission, west of Mission Street and north of Cesar Chavez Street, was populated as a largely middle-class suburb away from the densely-packed urban core.

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[11] *Supplemental Information Form for Historical Resource Evaluation* prepared by Page & Turnbull, Inc., 724 Pine Street, San Francisco, CA 94108. This document is on file and available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case No. 2006.1506E.

[12] City and County of San Francisco Planning Department, *Historic Resource Evaluation Response*, November 13, 2007. This document is on file and available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case No. 2006.1506E.

[13] Ibid.

Likewise, the Central Waterfront was already a well-established industrial area surrounded by enclaves of housing for factory and maritime workers and their families. After the 1906 conflagration, the open land in these areas was quickly developed to accommodate those left homeless. Potrero was desirable because of the area's proximity to downtown yet its distance away from the path of destruction. The infill housing that was built during this short time, defined as the "Reconstruction Period," when seen together in context, with the surrounding pre-fire development illustrates how the neighborhood evolved in relation to the surrounding environmental factors. The subject building is an excellent example and a contributor to a California Register-eligible potential historic district representing the typical type of residential construction and building styles constructed before the 1906 Earthquake and Fire and the Reconstruction Period.

There is a considerable architectural harmony among the historic houses and flats in the immediate neighborhood and which retain a high level of historic integrity. Staff believes that there is an eligible district that meets the architecture criterion. On the block of Wisconsin Street where the subject building is and across Wisconsin Street, there are thirteen properties identified through the 1976 Architectural Survey including the adjacent structure to the north. These properties consist of the project site at 749 Wisconsin Street, as well as 617 Wisconsin Street, 627 Wisconsin Street, 629 Wisconsin Street, 631 Wisconsin Street, 731 Wisconsin Street, 743 Wisconsin Street, 706 Wisconsin Street, 718 Wisconsin Street, 728 Wisconsin Street, 760 Wisconsin Street, 612 Arkansas Street, and 626 Arkansas Street. Residential structures within the district are largely modest in size and display a range of styles common the Bay Area during the late 19th and early 20th Centuries. Styles include Craftsman, Italianate, Classical Revival, and Queen Anne. The subject building is an interesting hybrid of Italianate and Queen Anne with Eastlake detailing. Such composite styles are not uncommon in frame residential architecture; however, the palette chosen by the architect/building contractor makes each one unique.

Integrity

Integrity is the ability of a property to convey its significance. To be a resource for the purposes of CEQA, a property must not only be shown to be significant under the California Register criteria, but it also must have integrity. The HRER indicates that the subject building retains a high level of historic integrity. An insertion of a garage opening on the south side of the Wisconsin Street-facing elevation has been executed in a sensitive manner that does not significantly impact any of the character-defining features of the subject structure. The ground-floor windows have been replaced with metal casement windows. The front stair railing and terrazzo stair, while historic, was not originally constructed with the building, but is consistent with the type of replacement stairs and railings that occurred early in the history of like buildings.

A permit issued in 1960 indicates a scope of work to repair fire damage, including, "replacing all wood siding, two windows, half the roof, and replacing the back porch." While the subject building is an unusual composition, there is no indication that the existing front façade possesses any replacement materials that are inconsistent in craftsmanship or style with a structure constructed in the early part of the 20th Century, aside from those changes stated previously that do not impact any of the character-defining features.

It is possible that the house was originally constructed as a one-story Italianate with a projecting square bay, similar to those found throughout the city, and the front-facing gable, with pediment and Eastlake detailing, was an early alteration to the subject building. Standard 4 of the Secretary of the Interior's Standards states, "Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved." Planning Department staff believes that, if the subject building was altered, and in compliance with Standard 4, the current state of the subject building exhibits a high level of historic integrity that contributes to the identified eligible district.

For these reasons, demolition of the subject building would have a significant, adverse impact on historical resources, both on the structure itself, and on a California Register-eligible potential historic district. This topic will be discussed in the EIR.

Archeological Resources

The proposed project would require minor excavation to a maximum depth of approximately six feet but to a depth of two feet in most areas for the one-level parking garage and foundation, and removal of approximately 10 cubic yards of soil. The project site is located in an area where prehistoric resources could be present. A shallow prehistoric midden was discovered approximately six feet below ground surface 1.5 miles northwest of the project site. That archeological site contained mostly dietary refuse, but also revealed artifacts such as obsidian tools, and was sporadically occupied for short periods between approximately 720 and 40 B.C.

The proposed project would result in soils disturbance. The maximum depth of excavation would be three feet or less. However, excavation in the southwest corner would be up to six feet below ground surface. Because the amount of excavation is limited, soil disturbance resulting from the proposed project is not expected to affect archeological resources. However, it is possible that undiscovered subsurface archeological resources at the site could be disturbed by project construction.[14] Implementation of Mitigation Measure M-CP-1 (Accidental Discovery) would reduce this impact to a less-than-significant level.

> **Mitigation Measure M-CP-1: Archeological Resources.** The following mitigation measure is required to avoid any potential adverse effect from the proposed project on accidentally discovered buried or submerged historical resources as defined in CEQA Guidelines Section 15064.5(a)(c). The project sponsor shall distribute the Planning Department archeological resource "ALERT" sheet to the project prime contractor; to any project subcontractor (including demolition, excavation, grading, foundation, pile driving, etc. firms); or utilities firm involved in soils disturbing activities within the project site. Prior to any soils disturbing activities being undertaken each contractor is responsible for ensuring that the "ALERT" sheet is circulated to all field personnel including, machine operators, field crew, pile drivers, supervisory personnel, etc. The project sponsor shall provide the Environmental Review Officer (ERO) with a signed affidavit from the responsible parties (prime contractor, subcontractor(s), and utilities firm) to the ERO confirming that all field personnel have received copies of the Alert Sheet.
>
> Should any indication of an archeological resource be encountered during any soils disturbing activity of the project, the project Head Foreman and/or project sponsor shall immediately notify the ERO and shall immediately suspend any soils disturbing activities in the vicinity of the discovery until the ERO has determined what additional measures should be undertaken.
>
> If the ERO determines that an archeological resource may be present within the project site, the project sponsor shall retain the services of a qualified archeological consultant. The archeological consultant shall advise the ERO as to whether the discovery is an archeological resource, retains sufficient integrity, and is of potential scientific/historical/cultural significance. If an archeological resource is present, the archeological consultant shall identify and evaluate the archeological

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[14] Memorandum from Don Lewis/Randall Dean to Debra Dwyer. February 26, 2010. Archeological Sensitivity 749 Wisconsin Street. A copy of this memorandum is available for review at the Planning Department, 1650 Mission Street, Suite 400, San Francisco as part of Case File 2006.1506E.

resource. The archeological consultant shall make a recommendation as to what action, if any, is warranted. Based on this information, the ERO may require, if warranted, specific additional measures to be implemented by the project sponsor.

Measures might include: preservation in situ of the archeological resource; an archeological monitoring program; or an archeological testing program. If an archeological monitoring program or archeological testing program is required, it shall be consistent with the Major Environmental Analysis (MEA) division guidelines for such programs. The ERO may also require that the project sponsor immediately implement a site security program if the archeological resource is at risk from vandalism, looting, or other damaging actions.

The project archeological consultant shall submit a Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describing the archeological and historical research methods employed in the archeological monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Copies of the Draft FARR shall be sent to the ERO for review and approval. Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Major Environmental Analysis division of the Planning Department shall receive three copies of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest or interpretive value, the ERO may require a different final report content, format, and distribution than that presented above.

Paleontological Resources

Paleontology is a multidisciplinary science that combines elements of geology, biology, chemistry, and physics in an effort to understand the history of life on earth. Paleontological resources, or fossils, are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. Paleontological resources include vertebrate, invertebrate, and plant fossils or the trace or imprint of such fossils. The fossil record is the only evidence that life on earth has existed for more than 3.6 billion years. Fossils are considered non-renewable resources because the organisms from which they derive no longer exist.

Thus, once destroyed, a fossil can never be replaced. Paleontological resources are lithologically dependent; that is, deposition and preservation of paleontological resources are related to the lithologic unit in which they occur. If the rock types representing a deposition environment conducive to deposition and preservation of fossils are not favorable, fossils will not be present. Lithological units that may be fossiliferous include sedimentary and volcanic formations. The project site is underlain by serpentine bedrock,[15] a common rock that is metamorphic, not sedimentary or volcanic. The proposed project would result in soils disturbance to a depth of less than three feet in most places and up to six feet in the southwest corner. In general, excavation would be on the order of approximately 2 feet below ground surface for the parking garage level and perimeter foundation. In addition, a serpentine rock outcrop in the basement would be removed through the use of jack hammering to break it into pieces. Because the amount of excavation is limited, and the serpentine rock at the site is not conducive to deposition and preservation of fossils, soil and rock disturbance resulting from the proposed project is not expected to affect paleontological resources or unique geological features, and no mitigation measures would be required.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
5. **TRANSPORTATION AND CIRCULATION—** Would the project:					
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels, obstructions to flight, or a change in location, that results in substantial safety risks?	☐	☐	☐	☐	☒

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[15] Stimac Associates, Inc., *Letter Report to Daniel Ewald, et al. — Ewald Tajbaksh Architecture, Subject: Geotechnical Investigation, Proposed Susoev Residence, 749 Wisconsin Street, San Francisco, CA 94103*, December 18, 2008.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	☐	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐	☐

The proposed project is not located within an airport land use plan area or in the vicinity of a private airstrip. Checklist item 5c is not applicable to the proposed project.

The proposed project does not include any design features that would substantially increase traffic hazards (e.g., creating a new sharp curve or dangerous intersections), and would not include any incompatible uses, as discussed above in Checklist Topic 1, Land Use and Land Use Planning. The project would not affect the existing street pattern nor have an impact on emergency vehicle access. For these reasons, Checklist items 5d and 5e will not be discussed further.

Street Network

The project site is located in the Potrero Hill neighborhood of San Francisco, east of Highway 101, and west of Highway 280. Wisconsin Street is a two-way non-thoroughfare local residential street which tends to stop and restart multiple times in the greater project vicinity. Twentieth Street to the north is a two-lane street lined collector street with mixed residential and commercial uses. While 20th Street does not provide access to either Highway 280 or Highway 101, it does include an overpass to the east over Highway 280, providing access to 3rd Street and Mission Bay. Twenty-second and 23rd Streets to the south are similar in size to Wisconsin Street; both are two-way residential streets. The nearest street designated in the San Francisco *General Plan* is Cesar Chavez Street, a Major Arterial Street that is also listed in the 2007 *City of San Francisco Congestion Management Plan.*[16] To the north, 20th Street is, in places, identified as a Neighborhood Commercial Street by the *General Plan*. Cesar Chavez and 23rd Streets west of Rhode Island are designated as Citywide Bicycle Routes.

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[16] San Francisco County Transportation Authority, Congestion Management Plan, Spring 2007. http://www.sfcta.org/images/stories/Planning/CongestionManagementPlan/2007%20-%20appendix%2004%20-%20los.pdf. Accessed January 7, 2010.

Traffic

Trip generation[17] as a result of the proposed project was calculated using the *2002 Transportation Impacts Analysis Guidelines for Environmental Review* (SF Guidelines) developed by the San Francisco Planning Department.[18] Compared to the existing vacant single-family residential unit on the site, the proposed project would generate an increase of about 18 person trips (inbound and outbound) on a weekday, consisting of 14 person trips by vehicle, three transit trips, one walk trip, and one trip by other means.[19] During the PM peak hour, the proposed project would generate an increase of two vehicle trips. These estimated two new PM peak hour vehicle trips would not substantially increase traffic volumes at intersections surrounding the project block.

Cumulative traffic growth would occur from other developments in San Francisco, including implementation of the *Showplace Square/Potrero Hill Area Plan*, as well as from the proposed project. Under 2025 Cumulative conditions, traffic is anticipated to increase. Due to the residential nature of the project area, it is unlikely that LOS conditions at nearby intersections would exceed LOS D. If so, these conditions would occur with or without the project. Assuming these LOS D intersections exceed 300 trips during PM peak hours, the proposed project would make a small contribution to the total 2025 Cumulative volumes at these intersections (less than 1 percent).

Transit

The project site is well served with various transit options for small-, medium-, and long-range trips. The San Francisco Municipal Transportation Agency (SFMTA) operates many bus lines in the area, the closest of which are the 10-Townsend line, which runs along the project block on Wisconsin Street and the 19-Polk line along De Haro Street, two blocks from the project site. Other bus lines in the vicinity of the project site include the 22-Fillmore, at 18th Connecticut Streets, approximately six blocks from the site, the 48-Quintara at 23rd and Kansas Streets, approximately seven blocks from the site, and the 9-San Bruno Avenue line along Potrero Street, approximately eight blocks from the project site. SFMTA also operates the T-Third Street Muni streetcar line through the station at 23rd and 3rd Streets, approximately 0.6 miles to the northeast. The nearest BART station is the 24th and Mission Station, approximately 1.15 miles to the southeast. The 48-Quintara bus connects the project site with the 24th and Mission BART station. The 22nd

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[17] During Associates, *Transportation Calculations*, January 7, 2010. These calculations are available for review as part of Case File No. 2006.1506E at the San Francisco Planning Department, 1650 Mission Street, Suite 400.

[18] City and County of San Francisco Planning Department, *Transportation Impact Analysis Guidelines for Environmental Review*, October 2002. http://www.sf-planning.org/Modules/ShowDocument.aspx?documentid=5370. Accessed January 7, 2010.

[19] Individual components do not sum to the total due to rounding error.

Street Caltrain Station is located 0.35 miles to the east at the intersection of 22nd Street and Highway 280 and is the nearest Caltrain station to the project site. Less than one additional PM peak hour transit trip would be generated by the proposed project, which would not noticeably affect transit service in the area or affect acceptable transit operations.

Parking

In the Residential, House, Two Family (RH-2) use district, the *Planning Code* off-street parking requirement for the project's residential uses would be two parking spaces (at one space per residential unit). The proposed project would provide two parking spaces (one for each unit) that would be available to the residents of the proposed project, which would comply with the *Planning Code* requirement.

The proposed project would generate a gross parking demand (which can differ from the *Planning Code* parking requirement) of three spaces, one space greater than the parking demand of two spaces generated by the existing residence on the site. This would exceed the proposed project's supply of two spaces, resulting in a shortfall of one space. Surveys of the project area have indicated that on-street parking supply exceeds demand at all times of day. Furthermore, the west side of Wisconsin Street in the project vicinity features perpendicularly oriented parking, maximizing the number of on-street parking spaces available. Because the parking stock in the area is sufficient, and the project's unmet parking demand is one parking space, the proposed project would not cause a substantial effect to parking supply in the project area.

Pedestrians

Pedestrian conditions in the vicinity of the project, on both sidewalks and crosswalks, were observed to be operating at acceptable levels of service. The project would generate an increase of less than one PM peak hour walk trip. This is not expected to change the existing pedestrian conditions.

Bicycles

In the vicinity of the project site, Potrero, Cesar Chavez, and Indiana Streets and portions of Kansas, 23rd, 16th, Mississippi, Mariposa and 17th Streets are designated Citywide Bicycle Routes. These routes are interconnected to the Citywide Bicycle Network and provide access to and from the project vicinity from locations throughout the city. During a field survey, the number of bicyclists observed to be riding in the vicinity of the project site was relatively low. Although the proposed project would result in an increase in the number of vehicles in the vicinity of the project site, this increase would not be substantial enough to affect bicycle travel in the area.

Under the *Planning Code,* Section 155(j), the proposed project would not be required to provide bicycle parking. Residents would be able to utilize the garage area or rear yard for bicycle storage.

Loading

No off-street loading spaces would be provided in the proposed residential project, and none are required in the *Planning Code* for RH-2 districts. The number of delivery and service vehicles generated by the proposed two dwelling units would be low (0.01 average hour truck trips and 0.01 peak hour truck trips). Deliveries would include residents moving in or out, for which spaces could be reserved through the SFMTA, and residential deliveries using standard delivery service providers such as FedEx or UPS, which already deliver packages in the area and would not contribute additional loading trips. The project's delivery and service trips could be met at the curb on Wisconsin Street, where the building's pedestrian and garage entrances would be located. Loading activity would not substantially interfere with pedestrian flow, which is low, or transit, which would not be obstructed by deliveries occurring on Wisconsin Street.

If a parking space is not available to accommodate the loading demand, delivery and service vehicles would likely double park on Wisconsin Street. As a local residential street, there would be sufficient clearance and minimal traffic volume for passing double-parked delivery vehicles for other motorists and for public transit routed over Wisconsin Street. For these reasons, double parking would not substantially affect traffic flow on Wisconsin Street.

Construction

The project construction period is anticipated to be approximately 15 months. There are no Muni bus stops on the east side of Wisconsin Street in the immediate project vicinity, and no bus stop relocation would be required. The proposed project's setback would not necessitate installation of a temporary covered pedestrian walkway along the project frontage during the construction period. Safety cones and caution tape would be utilized to delineate and divide the construction site from pedestrians. It is anticipated that no regular traffic lanes would be closed during construction. However, if it is determined that temporary traffic lane closures would be needed, they would be coordinated with City Departments including the Traffic Engineering Division of the SFMTA, the Police Department, the Fire Department, and the Planning Department in order to minimize the impacts on local traffic.

Throughout the construction period, there would be a flow of construction-related trucks into and out of the site.[20] The impact of construction truck traffic would be a temporary lessening of the capacities of local streets due to the slower movement and larger turning radii of trucks, which may affect both traffic and transit operations. The project sponsor and construction contractor(s) would meet with Interdepartmental Staff Committee on Traffic and Transportation (ISCOTT), the Traffic Engineering Division of the SFMTA, the Police Department, the Fire Department, the Planning Department, and other City agencies to determine feasible traffic mitigation measures to reduce traffic congestion and other potential transit disruption and pedestrian circulation effects during construction of the project. Construction workers who drive to the site would cause a temporary parking demand. There is a sufficient parking supply in the project vicinity for daytime construction worker parking. The effects of construction activities on parking and traffic would be limited in scope and temporary in duration, and therefore, would not result in a significant impact.

Transportation-related Plans and Policies

The proposed project would incrementally increase residential uses on the project site, but would not have substantial individual or cumulative effect on intersection operations, transit demand, pedestrian circulation, bicycles, parking, traffic hazards, or construction traffic. Due to the relatively small increase in demand on the transportation and circulation system represented by the proposed project, it is not anticipated to substantially affect the performance of the transportation and circulation system; and therefore, would not conflict with any plans, ordinances, or policies establishing measures of effectiveness for the system. Nor would the proposed project conflict with any congestion management programs, or adopted policies, plans, or programs regarding public transit or bicycle or pedestrian facilities; nor would the proposed project decrease the performance or safety of such facilities, for the reasons discussed above. The proposed project's transportation and circulation impacts would therefore be less than significant under CEQA.

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[20] During the first week of project construction (demolition), there would be approximately 10 trips per day to and from the project site, with trips occurring throughout the day. For the remainder of the construction period, there would be approximately eight truck trips per day, occurring in the morning and afternoon (from approximately 7:30 – 8:30 a.m. and approximately 3:30 – 4:30 p.m.).

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
6. NOISE—Would the project:					
a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐	☐
b) Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	☐
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	☐
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐	☐
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	☐	☐	☐	☐	☒
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☐	☒
g) Be substantially affected by existing noise levels?	☐	☐	☒	☐	☐

The project site is not within an airport land use plan area, nor is it in the vicinity of a private airstrip; therefore, Checklist items 6e and 6f are not applicable to the proposed project.

Ambient Noise Levels

Ambient noise levels in the project vicinity are typical of noise levels in greater San Francisco, which are dominated by vehicular traffic, including trucks, cars, Muni buses, and emergency vehicles. Wisconsin Street is lightly to moderately traveled, and generates low to moderate levels of traffic noise. Observation indicates that surrounding land uses, which are primarily residential, do not noticeably conduct noisy operations.

Construction Noise Impacts

Demolition, excavation, and building construction would temporarily increase noise in the project vicinity. Construction equipment would generate noise and possibly vibration that could be considered an annoyance by occupants of nearby properties.

According to the project sponsor, the construction period would last approximately 15 months. Construction noise levels would fluctuate depending on construction phase, equipment type and duration of use, distance between noise source and listener, and presence or absence of barriers. Impacts would generally be limited to the period during which new foundations and exterior structural and façade elements would be constructed. Interior construction noise would be substantially reduced by exterior walls.

Construction noise is regulated by the San Francisco Noise Ordinance (Article 29 of the Police Code), amended in November 2008. The ordinance requires that noise levels from individual pieces of construction equipment, other than impact tools, not exceed 80 dBA[21] at a distance of 100 feet from the source. Impact tools (jackhammers, hoe rammers, impact wrenches) must have both intake and exhaust muffled to the satisfaction of the Director of Public Works or the Director of Building Inspection. Section 2908 of the ordinance prohibits construction work between 8:00 p.m. and 7:00 a.m., if noise would exceed the ambient noise level by 5 dBA at the project property line, unless a special permit is authorized by the Director of Public Works or the Director of Building Inspection. The project must comply with regulations set forth in the Noise Ordinance.

The closest sensitive noise receptors to the project site that have the potential to be adversely affected by construction noise are the residences on both sides of the project and elsewhere along Wisconsin Street in the project vicinity. Construction activities (other than pile driving, which would not be employed in project construction) typically generate noise levels no greater than 90 dBA (for instance, for excavation) at 50 feet from the activity, while other activities, such as concrete work, are much less noisy. Closed windows typically can reduce daytime interior noise levels to an acceptable level. Therefore, for nearby sensitive receptors, although construction noise could be annoying at times, it would not be expected to exceed noise levels commonly experienced in an urban environment, and would not be considered significant. The building permit for a proposed addition to the building at 772 Wisconsin Street has been approved and is anticipated to be constructed within the next year. That project is located across Wisconsin Street and two lots to the south from the project site. The 772 Wisconsin Street addition project also would be subject to the Noise Ordinance, and it is unlikely that the demolition, foundation, and exterior construction phases of these two projects (which have the greatest potential to generate noise impacts) would coincide for substantial periods. For these reasons, cumulative effects related to construction noise would not be anticipated.

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[21] The acronym "dBA" stands for decibels using the A-weighted scale. A decibel is a unit of measurement for sound loudness (amplitude). The A-weighted scale is a logarithmic scale that approximates the sensitivity of the human ear.

The project sponsor anticipates using a poured concrete foundation. The proposed building would not use pile driving. The outcrop of serpentine bedrock in the southwest portion of the site, extending approximately two feet above grade, would be removed from the site with a jackhammer or pickaxe. As a result, the proposed project would not create unusual levels of ground borne vibration that would disturb nearby residents or businesses, and vibration impacts would be less than significant.

Noise Compatibility

The Environmental Protection Element of the *San Francisco General Plan* contains Land Use Compatibility Guidelines for Community Noise.[22] These guidelines, which are similar to but differ somewhat from state guidelines promulgated by the Governor's Office of Planning and Research, indicate maximum acceptable noise levels for various newly developed land uses. For residential uses, the maximum "satisfactory" noise level without incorporating noise insulation into a project is 60 dBA (Ldn), while the guidelines indicate that residential development should be discouraged at noise levels above 65 dBA (Ldn).[23,24] Where noise levels exceed 60 dBA, a detailed analysis of noise reduction requirements will normally be necessary prior to final review and approval, and new construction or development of residential uses will require that noise insulation features included in the design. In addition, Title 24 of the California Code of Regulations establishes uniform noise insulation standards for residential projects. Based on modeling of traffic noise volumes conducted by the San Francisco Department of Public Health (DPH),[25] the traffic noise level in the project area vicinity is generally between 60 dBA and 64 dBA. Therefore, the proposed project would not locate new residential units—considered to be "sensitive receptors"—in an environment with noise levels above those considered normally acceptable for residential uses, and the project sponsor would be required by the *San Francisco General Plan* and by Title 24 to incorporate noise insulation features in the project to maintain an interior noise level of 45 dBA. It is anticipated that, at a minimum, sound-rated windows and/or doors would be installed as part of the proposed project. The Department of Building Inspection would review project plans for compliance with Title 24 noise standards.

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[22] City and County of San Francisco, Planning Department, *San Francisco General Plan*, Environmental Protection Element, Policy 11.1.

[23] Sound pressure is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 dB to 140 dB corresponding to the threshold of pain. Because sound pressure can vary by over one trillion times within the range of human hearing, a logarithmic loudness scale is used to keep sound intensity numbers at a convenient and manageable level. Owing to the variation in sensitivity of the human ear to various frequencies, sound is "weighted" to emphasize frequencies to which the ear is more sensitive, in a method known as A-weighting and expressed in units of A-weighted decibels (dBA).

[24] The guidelines are based on maintaining an interior noise level of interior noise standard of 45 dBA, Ldn, as required by the California Noise Insulation Standards in Title 24, Part 2 of the California Code of Regulations.

[25] San Francisco Department of Public Health, Environmental Health, *Transportation Noise Map 2008* presented on the Department of Public Health (DPH) website: Online at http://www.sfdph.org/dph/files/EHSdocs/ehsPublsdocs/Noise/TransitNoiseMap.pdf. Accessed March 8, 2010.

Compliance with Title 24 standards and with the *General Plan* would ensure that effects from exposure to ambient noise would not result in significant impacts, either individually or cumulatively.

Traffic Noise

Generally, traffic must double in volume to produce a noticeable increase in average noise levels. Based on the transportation calculations prepared for the project (see Section 5, above), traffic volumes would not double on area streets as a result of the proposed project or expected cumulative traffic growth; therefore, the proposed project would not cause a noticeable increase in the ambient noise level in the project vicinity, nor would the project contribute to any potential cumulative traffic noise effects.

Operational Noise

The proposed project does not include air conditioning units of any kind. The project would include new mechanical equipment, such as solar water heaters, that could produce operational noise. These operations would be subject to Section 2909 of the Noise Ordinance. As amended in November 2008, this section establishes a noise limit from mechanical sources, such as building equipment, specified as a certain noise level in excess of the ambient noise level at the property line: for noise generated by residential uses, the limit is 5 dBA in excess of ambient, while for noise generated by commercial and industrial uses, the limit is 8 dBA in excess of ambient and for noise on public property, including streets, the limit is 10 dBA in excess of ambient. In addition, the Noise Ordinance provides for a separate fixed-source noise limit for residential interiors of 45 dBA at night and 55 dBA during the day and evening hours. Compliance with Article 29, Section 2909, would minimize noise from building operations. Therefore, noise effects related to building operation would not be significant, nor would the building contribute a considerable increment to any cumulative noise impacts from mechanical equipment.

In light of the above, noise effects related to the proposed project would be less than significant.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
7. **AIR QUALITY—Would the project:**					
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐	☐

Construction Emissions

Project-related demolition, excavation, grading, and other construction activities may cause wind-blown dust that could contribute particulate matter into the local atmosphere for approximately six months. Although there are federal standards for air pollutants and implementation of state and regional air quality control plans, air pollutants continue to have impacts on human health throughout the country. California has found that particulate matter exposure can cause health effects at lower levels than national standards. The current health burden of particulate matter demands that, where possible, public agencies take feasible available actions to reduce sources of particulate matter exposure. According to the California Air Resources Board, reducing ambient particulate matter from 1998-2000 levels to natural background concentrations in San Francisco would prevent over 200 premature deaths. Sensitive receptors in proximity to the proposed project site include seniors, children, or other persons with respiratory ailments, in the residences on both sides of the project and elsewhere along Wisconsin Street and the project vicinity. While construction emissions would occur in short-term, temporary phases, they could cause adverse effects on local air quality.

Dust can be an irritant causing watering eyes or irritation to the lungs, nose, and throat. Demolition, excavation, grading, and other construction activities can cause wind-blown dust to add to particulate matter in the local atmosphere. Depending on exposure, adverse health effects can occur due to this particulate matter in general and also due to specific contaminants such as lead or asbestos that may be constituents of soil.

In response, the San Francisco Board of Supervisors approved a series of amendments to the San Francisco Building and Health Codes generally referred hereto as the Construction Dust Control Ordinance (Ordinance 176-08, effective July 30, 2008) with the intent of reducing the quantity of dust generated during site preparation, demolition and construction work in order to protect the health of the general public and of onsite workers, minimize public nuisance complaints, and to avoid orders to stop work by the Department of Building Inspection (DBI).

The ordinance requires that all site preparation work, demolition, or other construction activities within San Francisco that have the potential to create dust or to expose or disturb more than 10 cubic yards or 500 square feet of soil comply with specified dust control measures whether or not the activity requires a permit from DBI. The proposed project, which would include removal of the existing foundation and construction of a new foundation, would disturb more than 500 square feet of soil, and would therefore be subject to the ordinance. The Director of DBI may waive this requirement for activities on sites less than one half-acre that are unlikely to result in any visible wind-blown dust.

Under the Dust Control Ordinance, the project sponsor and the contractor responsible for construction activities at the project site shall use the following practices to control construction dust on the site or other practices that result in equivalent dust control that are acceptable to the Director. Dust suppression activities may include watering all active construction areas sufficiently to prevent dust from becoming airborne; increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water must be used if required by Article 21, Section 1100 et seq. of the San Francisco Public Works Code. If not required, reclaimed water should be used whenever possible. Contractors shall provide as much water as necessary to control dust (without creating run-off in any area of land clearing, and/or earth movement). During excavation and dirt-moving activities, contractors shall wet sweep or vacuum the streets, sidewalks, paths, and intersections where work is in progress at the end of the workday. Inactive stockpiles (where no disturbance occurs for more than seven days) greater than 10 cubic yards or 500 square feet of excavated materials, backfill material, import material, gravel, sand, road base, and soil shall be covered with a 10 millimeter (0.01 inch) polyethylene plastic (or equivalent) tarp, braced down, or use other equivalent soil stabilization techniques.

In addition to the measures contained in the ordinance above, the project sponsor would be required to follow California Code of Regulations (CCR) Section 93015: Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations, for potential impacts due to the removal or disturbance of serpentine soils, which contains naturally occurring asbestos. These measures are described under Checklist topic 16 below, Hazards and Hazardous Materials, beginning on page 85. As described there, following the requirements of CCR Section 93105, identified herein as mitigation measure M-HZ-1, would ensure that impacts related to naturally occurring asbestos would be less than significant. Following the section's requirements would also help prevent exposure to construction dust in general.

These regulations and procedures set forth by the *San Francisco Building Code,* the *California Code of Regulations,* and mitigation measure M-HZ-1 would ensure that potential dust-related air quality impacts would be reduced to a level of less than significant.

Traffic Emissions

The BAAQMD has established thresholds for projects requiring its review for potential air quality impacts.[26] These thresholds are based on minimum size projects that the BAAQMD considers capable of producing air quality problems due to vehicular emissions. The BAAQMD generally does not recommend a detailed air quality analysis for residential projects with fewer than 320 single-family or 510 multi-family units, or projects that would generate fewer than 2,000 vehicle trips per day. The proposed project would construct two residential units, which would generate 13 daily vehicle trips, substantially fewer than the BAAQMD threshold of 2,000 daily vehicle trips. Therefore, no detailed air quality analysis is needed, and no significant air quality impacts due to vehicular emissions would be generated by the proposed project.

Toxic Air Contaminants

The California Air Resources Board (CARB) established its statewide comprehensive air toxics program in the early 1980s. CARB created California's program in response to the Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983) to reduce exposure to air toxics. CARB identifies 244 substances as Toxic Air Contaminants (TACs) that are known or suspected to be emitted in California and have potential adverse health effects. Public health research consistently demonstrates that pollutant levels are significantly higher near freeways and busy roadways. Human health studies demonstrate that children living within 100 to 200 meters of freeways or busy roadways have poor lung function and more respiratory disease; both chronic and acute health effects may result from exposure to TACs. In 2005, CARB issued guidance on preventing roadway related air quality conflicts, suggesting localities "avoid siting new sensitive land uses within 500 feet of a freeway or other urban roads with volumes of more than 100,000 vehicles/day."[27] However, there are no existing federal or state regulations to protect sensitive land uses from roadway air pollutants.

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[26] BAAQMD CEQA Guidelines, April 1996, Revised December 1999, page 25.

The San Francisco Department of Public Health (DPH) has issued guidance for the identification and assessment of potential air quality hazards and methods for assessing the associated health risks.[28] Consistent with CARB guidance, DPH has identified that a potential public health hazard for sensitive land uses exists when such uses are located within a 150-meter (approximately 500-foot) radius of any boundary of a project site that experiences 100,000 vehicles per day. To this end, San Francisco added Article 38 of the San Francisco Health Code, approved November 25, 2008, which requires that, for new residential projects of 10 or more units located in proximity to high-traffic roadways, as mapped by DPH, an Air Quality Assessment be prepared to determine whether residents would be exposed to potentially unhealthful levels of $PM_{2.5}$. In addition, the requirement for an air quality assessment applies to any new residential development within the Eastern Neighborhoods that is located in proximity to high-traffic roadways as mapped by DPH, Through air quality modeling, an assessment is conducted to determine if the annual average concentration of $PM_{2.5}$ from the roadway sources would exceed a concentration of 0.2 micrograms per cubic meter (annual average).[29] If this standard is exceeded, the project sponsor must install a filtered air supply system, with high-efficiency filters, designed to remove at least 80 percent of ambient $PM_{2.5}$ from habitable areas of residential units.

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[27] California Air Resources Board, 2005 Air Quality and Land Use Handbook: A Community Health Perspective, http://www.arb.ca.gov/ch/landuse.htm, accessed September 8, 2008.

[28] San Francisco Department of Public Health, Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review, May 6, 2008, http://dphwww.sfdph.org/phes/publications/Mitigating_Roadway_AQLU_Conflicts.pdf, accessed September 8, 2008.

[29] According to DPH, this threshold, or action level, of 0.2 micrograms per cubic meter represents about 8 – 10 percent of the range of ambient PM2.5 concentrations in San Francisco based on monitoring data, and is based on epidemiological research that indicates that such a concentration can result in an approximately 0.28 percent increase in non-injury mortality, or an increased mortality at a rate of approximately 20 "excess deaths" per year per one million population in San Francisco. "Excess deaths" (also referred to as premature mortality) refer to deaths that occur sooner than otherwise expected, absent the specific condition under evaluation; in this case, exposure to $PM_{2.5}$. (San Francisco Department of Public Health, Occupational and Environmental Health Section, Program on Health, Equity, and Sustainability, "Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review, May 6, 2008. Twenty excess deaths per million based on San Francisco's non-injury, non-homicide, non-suicide mortality rate of approximately 714 per 100,000. Although San Francisco's population is less than one million, the presentation of excess deaths is commonly given as a rate per million population.)

The project site, at 749 Wisconsin Street, is located within the Potential Roadway Exposure Zone, as mapped by DPH. In consultation with DPH, an Air Quality Assessment was prepared. Results of the assessment indicate that the project site does not exceed a $PM_{2.5}$ concentration greater than 0.2 micrograms per cubic meter.[30] Thus, the proposed project is not expected to result in a significant air quality impact from exposure of sensitive receptors to high concentrations of roadway-related pollutants.

Odors

The project would not result in a perceptible increase or change in noxious odors on the project site or in the vicinity of the project, as it would not include uses prone to generation of noxious odors. Observation indicates that surrounding land uses are not sources of noticeable odors, and therefore, would not adversely affect project residents.

For the reasons discussed above, the proposed project would have a less-than-significant air quality impact.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
8. GREENHOUSE GAS EMISSIONS— Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	☐
a) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒	☐

Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHGs) because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHG's has been implicated as the driving force for global climate change. The primary GHGs are carbon dioxide, methane, nitrous oxide, ozone, and water vapor.

While the presence of the primary GHGs in the atmosphere are naturally occurring, carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) are largely emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of carbon dioxide are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices and landfills. Other GHGs include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes. Greenhouse gases are typically reported in "carbon dioxide-equivalent" measures (CO_2E).[31]

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[30] Jennifer McLaughlin, San Francisco Dept. of Public Health, Environmental Health, email to Stu During, During Associates, June 29, 2009. This document is on file and available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case No. 2006.1506E.

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.[32]

The Air Resources Board (ARB) estimated that in 2006 California produced about 484 million gross metric tons of CO_2E ($MMTCO_2E$), or about 535 million U.S. tons.[33] The ARB found that transportation is the source of 38 percent of the State's GHG emissions, followed by electricity generation (both in-state and out-of-state) at 22 percent and industrial sources at 20 percent. Commercial and residential fuel use (primarily for heating) accounted for 9 percent of GHG emissions.[34] In the Bay Area, fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) and the industrial and commercial sectors are the two largest sources of GHG emissions, each accounting for approximately 36 percent of the Bay Area's 95.8 $MMTCO_2E$ emitted in 2007.[35] Electricity generation accounts for approximately 16 percent of the Bay Area's GHG emissions followed by residential fuel usage at 7 percent, off-road equipment at 3 percent and agriculture at 1 percent.[36]

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[31] Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxide-equivalents," which present a weighted average based on each gas's heat absorption (or "global warming") potential.

[32] California Climate Change Portal. Frequently Asked Questions About Global Climate Change. Available online at: http://www.climatechange.ca.gov/publications/faqs.html. Accessed March 2, 2010.

[33] California Air Resources Board (ARB), "California Greenhouse Gas Inventory for 2000-2006— by Category as Defined in the Scoping Plan." http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_2009-03-13.pdf. Accessed March 2, 2010.

[34] Ibid.

[35] Bay Area Air Quality Management District, Source Inventory of Bay Area Greenhouse Gas Emissions: Base Year 2007, Updated: February 2010. Available online at: http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/Emission%20Inventory/regionalinventory2007_2_10.ashx. Accessed March 2, 2010.

[36] Ibid.

Senate Bill 97 (SB 97) requires the Office of Planning and Research (OPR) to amend the state CEQA guidelines to address the feasible mitigation of GHG emissions or the effects of GHGs. In response, OPR amended the CEQA guidelines, effective March 18, 2010, by amending various sections of the guidelines to provide guidance for analyzing GHG emissions. Among other CEQA Guidelines changes, the amendments add a new section to the CEQA Checklist (CEQA Guidelines Appendix G) to address questions regarding the project's potential to emit GHGs. OPR's amendments to the CEQA Guidelines have been incorporated into this analysis accordingly.

Greenhouse Gas Emissions.

The most common GHGs resulting from human activity are CO_2, CH_4, and N_2O.[37] State law defines GHGs to also include hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These latter GHG compounds are usually emitted in industrial processes, and therefore not applicable to the proposed project. The GHG calculation presented in this analysis includes an estimate of emissions from CO_2, N_2O, and CH_4. Individual projects contribute to the cumulative effects of climate change by emitting GHGs during construction and operational phases. Both direct and indirect GHG emissions are generated by project operations. Operational emissions include GHG emissions from new vehicle trips and area sources (natural gas combustion). Indirect emissions include emissions from electricity providers, energy required to pump, treat, and convey water, and emissions associated with landfill operations.

The proposed project would increase the activity onsite by replacing a single-family residence with a two-unit residential building. Therefore, the proposed project would contribute to annual long-term increases in GHGs as a result of increased vehicle trips (mobile sources) and residential operations associated with energy use, water use and wastewater treatment, and solid waste disposal. Construction of the proposed project would emit 183 $MTCO_2E$.[38] Direct project emissions of carbon dioxide equivalents (CO_2E) (including CO_2, NO_x, and CH_4 emissions) include nine $MTCO_2E$/year from transportation, and one (1) $MTCO_2E$ /year from heating, for a total of ten $MTCO_2E$/year of project-emitted GHGs. The project would also indirectly result in GHG emissions from off-site electricity generation at power plants (approximately four $MTCO_2E$/year), energy required to convey, pump and treat water and wastewater (a relatively small amount, approximately 0.1 $MTCO_2E$/year), and anaerobic decomposition of solid waste disposal at landfills, mostly in the form of methane (approximately one $MTCO_2E$/year), for a GHG emissions total of approximately 14 $MTCO_2E$/year, rounded to the nearest whole number. Construction emissions represent approximately 0.0002 percent of the Bay Area's GHGs emitted in 2007, and annual emissions represent approximately 0 percent of total Bay Area GHGs emitted in 2007.[39]

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[37] Governor's Office of Planning and Research. *Technical Advisory- CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review.* June 19, 2008. Available at the Office of Planning and Research's website at: http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf. Accessed March 3, 2010.

[38] Construction emissions and annual emissions are not intended to be additive as they occur at different points in the project's lifecycle. Construction emissions are one-time emissions that occur prior to building occupancy. Annual emissions are incurred only after construction of the proposed project and are expected to occur annually for the life of the project.

The GHG estimate above does not include emission reductions from compliance with the City's regulations that would reduce the project's GHG emissions. Specifically, the proposed project would include the following project design features as required by city regulations:

Table 2
GHG Regulations Applicable to the Proposed Project

Regulation	Project Requirement
Commercial and Residential Water Conservation Ordinances (SF Building Code, Chapters 13A and Housing Code, Chapter 12A)	Requires projects to meet the following minimum standards: 1. All showerheads have a maximum flow of 2.5 gallons per minute (gpm) 2. All showers have no more than one showerhead per valve 3. All faucets and faucet aerators have a maximum flow rate of 2.2 gpm 4. All Water Closets (toilets) have a maximum rated water consumption of 1.6 gallons per flush (gpf) 5. All urinals have a maximum flow rate of 1.0 gpf 6. All water leaks have been repaired.
Construction Demolition and Debris Recovery Ordinance (Environment Code, Chapter 14)	Requires that projects proposing demolition divert 65 percent of their construction & demolition debris from landfills to reuse/recycling.
Street Tree Planting Requirements for New Construction (*Planning Code* Section 143)	*Planning Code* Section 143 requires new construction, significant alterations or relocation of buildings within many of San Francisco's zoning districts to plant one 24-inch box tree for every 20 feet along the property street frontage, and the proposed project would include one such street tree along its frontage.

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[39] Bay Area Air Quality Management District. *Source Inventory of Bay Area Greenhouse Gas Emissions*. Updated: February 2010. 939 Ellis Street, San Francisco, CA 94109. The Bay Area Air Quality Management District reported regional Bay Area GHGs emissions in 2007 at approximately 95.8 $MMTCO_2E$. Bay Area 2007 GHG emissions are used as the baseline for determining whether a project's contributions are significant as these are the most recent emissions inventory for the bay area.

In addition to complying with the above City regulations, the proposed project would also include the following additional project design features:

1. The project is proposed to be a green (i.e., ecologically friendly) home that would be eligible for California GreenPoint Certification, denoting that the structure has high energy efficiency, is constructed using best management practices, and economically incorporates eco-conscious design features with health and sustainable community benefits.
2. The proposed project's primary source of energy would be a solar photovoltaic power supply.
3. The proposed project would employ radiant hydronic heat and hot water, supplemented with an on-demand system.
4. Windows and appliances would be Energy Star-rated and energy-efficient lighting fixtures would be employed throughout the building.
5. Architectural trims, doors, fixtures, and other building materials in the existing building would be recovered for reuse or recycled.
6. Bricks and rock in the existing building foundation would be reused as hardscaping materials in the landscaped areas of the project.
7. New building materials would be extracted, manufactured, or produced with a 500-mile radius of San Francisco.
8. The proposed project would include a living roof, planted with drought-tolerant sedges.
9. A series of four cistern tanks located under the raised fourth-level deck would store captured rainwater for reuse as irrigation water for the rear-yard landscaping.

San Francisco has been actively pursuing cleaner energy, alternative transportation, and solid waste policies, many of which have been codified into regulations as shown above. In addition, San Francisco is phasing in the requirement that all new development projects (for which building permits have not yet been filed, or filed within the past few years) achieve GreenPoint certification. In an independent review of San Francisco's communitywide emissions it was reported that San Francisco has achieved a five percent reduction in community-wide GHG emissions below the Kyoto Protocol 1990 baseline levels. The 1997 Kyoto Protocol sets a greenhouse gas reduction target of seven percent below 1990 levels by 2012. The "community-wide inventory" includes greenhouse gas emissions generated by San Francisco by its residents, businesses, and commuters, as well as by municipal operations. The inventory also includes emissions from both transportation and building energy sources.[40]

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[40] *City and County of San Francisco: Community GHG Inventory Review.* August 1, 2008. IFC International, 394 Pacific Avenue, 2nd Floor, San Francisco, CA 94111. Prepared for City and County of San Francisco, Department of the Environment.

As infill development, the proposed project would be constructed in an urban area with good transit access, reducing regional vehicle trips and vehicle miles traveled. Additionally, compliance with the City's regulations, as discussed above, would reduce the project's overall GHG emissions. Given that San Francisco has implemented binding and enforceable programs to reduce GHG emissions applicable to the proposed project and that San Francisco's sustainable policies have resulted in the measured success of reduced GHG emissions levels, the proposed project's GHG emissions would result in a less than significant impact.

Consistency with Applicable Plans.

Both the State and the City of San Francisco have adopted programs for reducing greenhouse gas emissions, as discussed below.

Assembly Bill 32

In 2006, the California legislature passed Assembly Bill No. 32 (California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires ARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions).

Pursuant to AB 32, ARB adopted a Scoping Plan in December 2008, outlining measures to meet the 2020 GHG reduction limits. In order to meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business as usual emissions levels, or about 15 percent from today's levels.[41] The Scoping Plan estimates a reduction of 174 million metric tons of CO_2E ($MMTCO_2E$) (about 191 million U.S. tons) from the transportation, energy, agriculture, forestry, and high global warming potential sectors, see Table 3, page 57. ARB has identified an implementation timeline for the GHG reduction strategies in the Scoping Plan.[42] Some measures may require new legislation to implement, some will require subsidies, some have already been developed, and some will require additional effort to evaluate and quantify. Additionally, some emissions reductions strategies may require their own environmental review under CEQA or the National Environmental Policy Act (NEPA).

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[41] California Air Resources Board, California's Climate Plan: Fact Sheet. Available online at: http://www.arb.ca.gov/cc/facts/scoping_plan_fs.pdf. Accessed March 4, 2010.

[42] California Air Resources Board. AB 32 Scoping Plan. Available Online at: http://www.arb.ca.gov/cc/scopingplan/sp_measures_implementation_timeline.pdf. Accessed March 2, 2010.

Table 3
GHG Reductions from the AB 32 Scoping Plan Sectors[43]

GHG Reduction Measures By Sector	GHG Reductions (MMT CO2E)
Transportation Sector	62.3
Electricity and Natural Gas	49.7
Industry	1.4
Landfill Methane Control Measure (Discrete Early Action)	1
Forestry	5
High Global Warming Potential GHGs	20.2
Additional Reductions Needed to Achieve the GHG Cap	34.4
Total	**174**
Other Recommended Measures	
Government Operations	1-2
Agriculture- Methane Capture at Large Dairies	1
Methane Capture at Large Dairies	1
Additional GHG Reduction Measures	
Water	4.8
Green Buildings	26
High Recycling/ Zero Waste • Commercial Recycling • Composting • Anaerobic Digestion • Extended Producer Responsibility • Environmentally Preferable Purchasing	9
Total	**42.8-43.8**

AB 32 also anticipates that local government actions will result in reduced GHG emissions. ARB has identified a GHG reduction target of 15 percent from current levels for local governments themselves and notes that successful implementation of the plan relies on local governments' land use planning and urban growth decisions because local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions.

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[43] Ibid.

The Scoping Plan relies on the requirements of Senate Bill 375 (SB 375) to implement the carbon emission reductions anticipated from land use decisions. SB 375 was enacted to align local land use and transportation planning to further achieve the State's GHG reduction goals. SB 375 requires regional transportation plans, developed by Metropolitan Planning Organizations (MPOs), to incorporate a "sustainable communities strategy" in their regional transportation plans (RTPs) that would achieve GHG emission reduction targets set by ARB. SB 375 also includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development. SB 375 would be implemented over the next several years and the Metropolitan Transportation Commission's 2013 RTP would be its first plan subject to SB 375.

City and County of San Francisco GHG Reduction Strategy

In addition to the State's GHG reduction strategy (AB 32), the City has developed its own strategy to address greenhouse gas emissions on a local level. The vision of the strategy is expressed in the City's Climate Action Plan, however implementation of the strategy is appropriately articulated within other citywide plans (*General Plan, Sustainability Plan*, etc.), policies (Transit-First Policy, Precautionary Principle Policy, etc.), and regulations (Green Building Ordinance, etc.). The following plans, policies, and regulations highlight some of the main components of San Francisco's GHG reduction strategy.

Overall GHG Reduction Sector

- *San Francisco Sustainability Plan*. In July 1997 the Board of Supervisors endorsed the Sustainability Plan for the City of San Francisco establishing sustainable development as a fundamental goal of municipal public policy.
- *The Climate Action Plan for San Francisco*. In February 2002, the San Francisco Board of Supervisors passed the Greenhouse Gas Emissions Reduction Resolution (Number 158-02) setting a goal for the City and County of San Francisco to reduce GHG emissions to 20 percent below 1990 levels by the year 2012. In September 2004, the San Francisco Department of the Environment and the Public Utilities Commission published the *Climate Action Plan for San Francisco: Local Actions to Reduce Greenhouse Emissions*.[44] The Climate Action Plan provides the context of climate change in San Francisco and examines strategies to meet the 20 percent GHG reduction target. Although the Board of Supervisors has not formally committed the City to perform the actions addressed in the Plan, and many of the actions require further development and commitment of resources, the Plan serves as a blueprint for GHG emission reductions, and several actions have been implemented or are now in

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[44] San Francisco Department of the Environment and San Francisco Public Utilities Commission, Climate Action Plan for San Francisco, Local Actions to Reduce Greenhouse Emissions, September 2004.

progress.

- *Greenhouse Gas Reduction Ordinance.* In May 2008, the City of San Francisco adopted an ordinance amending the San Francisco Environment Code to establish City GHG emission targets and departmental action plans, to authorize the Department of the Environment to coordinate efforts to meet these targets, and to make environmental findings. The ordinance establishes the following GHG emission reduction limits for San Francisco and the target dates to achieve them:
  - Determine 1990 City GHG emissions by 2008, the baseline level with reference to which target reductions are set;
  - Reduce GHG emissions by 25 percent below 1990 levels by 2017;
  - Reduce GHG emissions by 40 percent below 1990 levels by 2025; and
  - Reduce GHG emissions by 80 percent below 1990 levels by 2050.

  The ordinance also specifies requirements for City departments to prepare departmental Climate Action Plans that assess, and report to the Department of the Environment, GHG emissions associated with their department's activities and activities regulated by them, and prepare recommendations to reduce emissions. As part of this, the San Francisco Planning Department is required to: (1) update and amend the City's applicable *General Plan* elements to include the emissions reduction limits set forth in this ordinance and policies to achieve those targets; (2) consider a project's impact on the City's GHG reduction limits specified in this ordinance as part of its review under CEQA; and (3) work with other City departments to enhance the "transit first" policy to encourage a shift to sustainable modes of transportation thereby reducing emissions and helping to achieve the targets set forth by this ordinance.

Transportation Sector

- *Transit First Policy.* In 1973 San Francisco instituted the Transit First Policy (Article 8A, Section 8A.115. of the City Charter) with the goal of reducing the City's reliance on freeways and meeting transportation needs by emphasizing mass transportation. The Transit First Policy gives priority to public transit investments; adopts street capacity and parking policies to discourage increased automobile traffic; and encourages the use of transit, bicycling and walking rather than use of single-occupant vehicles.

- *San Francisco Municipal Transportation Agency's Zero Emissions 2020 Plan.* The SFMTA's Zero Emissions 2020 plan focuses on the purchase of cleaner transit buses including hybrid diesel-electric buses. Under this plan hybrid buses will replace the oldest diesel buses, some dating back to 1988. The hybrid buses emit 95 percent less particulate matter (PM, or soot) than the buses they replace, they produce 40 percent less oxides of nitrogen (NOx), and they reduce GHGs by 30 percent.

- *San Francisco Municipal Transportation Agency's Climate Action Plan.* In November 2007 voters passed Proposition A, requiring the SFMTA to develop a plan to reach a 20 percent GHG reduction below 1990 levels by 2012 for the City's entire transportation sector, not merely in the SFMTA's internal operations. SFMTA has prepared a *Draft Climate Action Plan* outlining measures needed to achieve these targets.

- *Commuter Benefit Ordinance.* The Commuter Benefit Ordinance (Environment Code, Section 421), effective January 19, 2009, requires all employers in San Francisco that have 20 or more employees to offer one of the following benefits: (1) A Pre-tax Transit Benefit, (2) Employer Paid Transit Benefits, or (3) Employer Provided Transit.

- The City's *Planning Code* reflects the latest smart growth policies and includes: electric vehicle refueling stations in city parking garages, bicycle storage facilities for commercial and office buildings, and zoning that is supportive of high density mixed-use infill development. The City's more recent area plans, such as Rincon Hill and the Market and Octavia Area Plan, provide transit-oriented development policies that allow for neighborhood-oriented retail and services and where off-street parking is limited to accessory parking spaces.[45]. At the same time there is also a community-wide focus on ensuring San Francisco's neighborhoods as "livable" neighborhoods, including the Better Streets Plan that would improve San Francisco's streetscape, the Transit Effectiveness Plan, that aims to improve transit service, and the Bicycle Plan, all of which promote alternative transportation options.

Renewable Energy

- *The Electricity Resource Plan (Revised December 2002).* San Francisco adopted the Electricity Resource Plan to help address growing environmental health concerns in San Francisco's southeast community, home of two power plants. The plan presents a framework for assuring a reliable, affordable, and renewable source of energy for the future of San Francisco.

- *Go Solar SF.* On July 1, 2008, the San Francisco Public Utilities Commission (SFPUC) launched their "GoSolarSF" program to San Francisco's businesses and residents, offering incentives in the form of a rebate program that could pay for approximately half the cost of installation of a solar power system, and more to those qualifying as low-income residents. The San Francisco Planning Department and Department of Building Inspection have also developed a streamlining process for Solar Photovoltaic (PV) Permits and priority permitting mechanisms for projects pursuing LEED® Gold Certification.

Green Building

- *LEED® Silver for Municipal Buildings.* In 2004, the City amended Chapter 7 of the Environment code, requiring all new municipal construction and major renovation projects to achieve LEED® Silver Certification from the US Green Building Council.

- *City of San Francisco's Green Building Ordinance.* On August 4, 2008, Mayor Gavin Newsom signed into law San Francisco's Green Building Ordinance for newly constructed residential and commercial buildings and renovations to existing buildings. The ordinance specifically requires newly constructed commercial buildings over 5,000 square feet (sq. ft.), residential buildings over 75 feet in height, and renovations on buildings over 25,000 sq. ft. to be subject to an unprecedented level of LEED® and green building certifications, which makes San Francisco the city with the most stringent green building requirements in the nation. Cumulative benefits of this ordinance includes reducing CO2 emissions by 60,000 tons, saving 220,000 megawatt hours of power, saving 100 million gallons of drinking water, reducing waste and stormwater by 90 million gallons of water, reducing construction and demolition waste by 700 million pounds, increasing the valuations of recycled materials by $200 million, reducing automobile trips by 540,000, and increasing green power generation by 37,000 megawatt hours.[46]

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[45] See *Planning Code* Sections 206.4 and 155.1.

Waste Reduction

- *Zero Waste.* In 2004, the City of San Francisco committed to a goal of diverting 75 percent of its' waste from landfills by 2010, with the ultimate goal of zero waste by 2020. San Francisco currently recovers 72 percent of discarded material.
- *Construction and Demolition Debris Recovery Ordinance.* In 2006 the City of San Francisco adopted Ordinance No. 27-06, requiring all construction and demolition debris to be transported to a registered facility that can divert a minimum of 65 percent of the material from landfills. This ordinance applies to all construction, demolition, and remodeling projects within the City.
- *Universal Recycling and Composting Ordinance.* Signed into law on June 23, 2009, this ordinance requires all residential and commercial building owners to sign up for recycling and composting services. Any property owner or manager who fails to maintain and pay for adequate trash, recycling, and composting service is subject to liens, fines, and other fees.
- The City has also passed ordinances to reduce waste from retail and commercial operations. Ordinance 295-06, the Food Waste Reduction Ordinance, prohibits the use of polystyrene foam disposable food service ware and requires biodegradable/compostable or recyclable food service ware by restaurants, retail food vendors, City Departments, and City contractors. Ordinance 81-07, the Plastic Bag Reduction Ordinance, requires many stores located within the City and County of San Francisco to use compostable plastic, recyclable paper and/or reusable checkout bags.

AB 32 contains a comprehensive approach for developing regulations to reduce statewide GHG emissions. ARB acknowledges that decisions on how land is used will have large effects on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas sectors. Many of the measures in the Scoping Plan—such as implementation of increased fuel efficiency for vehicles (the "Pavley" standards), increased efficiency in utility operations, and development of more renewable energy sources—require statewide action by government, industry, or both.

Some of the Scoping Plan measures are at least partially applicable to development projects, such as increasing energy efficiency in new construction, installation of solar panels on individual building roofs, and a "green building" strategy. As evidenced above, the City has already implemented several of these measures that require local government action, such as a Green Building Ordinance, a Zero Waste strategy, a Construction and Demolition Debris Recovery Ordinance, and a solar energy generation subsidy program, to realize meaningful reductions in GHG emissions. These programs (and including others not listed) collectively comprise San Francisco's GHG reduction strategy and continue San Francisco's efforts to reduce the City's greenhouse gas emissions to 20 percent below 1990 levels by the year 2012, a goal outlined in the City's 2004 Climate Action Plan. The City's GHG reduction strategy also furthers the State's efforts to reduce statewide GHG emissions as mandated by AB 32.

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[46] These findings are contained within the final Green Building Ordinance, signed by the Mayor August 4, 2008.

The proposed project would be required to comply with GHG reduction regulations as discussed above, as well as applicable AB 32 Scoping Plan measures that are ultimately adopted and become effective during implementation of proposed project. Given that the City has adopted numerous GHG reduction strategies recommended in the AB 32 Scoping Plan, that the City's GHG reduction strategy includes binding, enforceable measures to be applied to development projects, such as the proposed project, and that the City's GHG reduction strategy has produced measurable reductions in GHG emissions, the proposed project would not conflict with either the state or local GHG reduction strategies. In addition the proposed project would not conflict with any plans, policies, or regulations adopted for the purpose of reducing GHG emissions. Therefore, the proposed project would have a less than significant impact with respect to GHG emissions.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
9. **WIND AND SHADOW**—Would the project:					
a) Alter wind in a manner that substantially affects public areas?	☐	☐	☒	☐	☐
b) Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?	☐	☐	☒	☐	☐

Wind

Winds in San Francisco are generally from the west, off the Pacific Ocean. Wind speeds, in general, are greatest in the spring and summer, and lowest in the fall, and generally the strongest wind (speed) is in the late afternoon and the lightest is in the morning.

Ground-level wind accelerations near buildings are controlled by three main elements: exposure, massing, and orientation. Exposure is a measure of the extent that the building extends above surrounding structures into the wind stream. A building that is surrounded by taller structures is not likely to cause adverse wind accelerations at ground level. Building massing controls how much wind is intercepted by a structure and patterns of wind distribution and accelerations. In general, a flat façade would have a greater potential for wind acceleration, particularly at the ground level, as compared to an articulated façade, i.e. buildings with unusual shapes or that utilize set-backs. Similar to massing, orientation determines how much wind is intercepted by the structure, a factor that directly determines wind acceleration. In general, buildings that are oriented with their wide axis across the prevailing wind direction will have a greater impact on ground-level winds than a building oriented with its long axis along the prevailing wind direction.

The project site, occupied by a single-family home approximately 27 feet high, is located mid-block on the east side of Wisconsin Street within the block bounded by 20th, Wisconsin, Madera, and Arkansas Streets. The buildings on either side of the project site are four stories in height, and the buildings west of the project site, on Wisconsin Street, are two to three stories in height. Potrero Hill slopes upwards to the west, reaching a peak of approximately 290 feet above msl one block to the west at Carolina Street. The project site sits at approximately 267 feet above msl.

For westerly and northwesterly winds, only the top three to five feet of the proposed building would rise above adjacent structures to the north and south, and buildings uphill and west of the project site would completely screen the proposed project from wind exposure. Thus, the proposed building would be mostly sheltered from the prevailing westerly and northwesterly winds. Due to the height (40 feet) and massing of the proposed structure, and the location of existing structures, any wind accelerations generated by the project would be limited. The proposed project would vertically extend, but not substantially alter, the existing streetwall of buildings immediate to the project site along Wisconsin Street. As a result, the project would not have a significant impact on wind at the entry of the project or the adjacent sidewalks. For these reasons, the project would not result in significant wind impact.

In summary, based on consideration of the height, exposure, massing, and orientation of the proposed project, the proposed building would not have the potential to cause significant changes to the wind environment in pedestrian areas adjacent or near the site. The proposed project would not affect the climate either in the neighborhood or regionally. Accordingly, the proposed project would result in a less-than-significant wind impact.

Shadow

Section 295 of the *Planning Code* was adopted in response to Proposition K (passed November 1984) in order to protect certain public open spaces from shadowing by new structures during the period between one hour after sunrise and one hour before sunset, year round. *Planning Code* Section 295 restricts net new shadow on public open spaces under the jurisdiction of, or to be acquired by, the Recreation and Park Department, by any structure exceeding 40 feet, unless the Planning Commission, in consultation with the Recreation and Park Commission, finds the impact to be less than significant.

The proposed project would not exceed 40 feet; therefore, Section 295 would not apply and the proposed project would not have a significant effect on shadows. The proposed project would shade adjacent properties, but would not increase the total amount of shading in the neighborhood above levels that are common and generally accepted in urban areas. The Potrero Hill Recreation Center (PHRC) is one block southeast of the project and is Recreation and Park Department property. Distance would prevent evening project shadows from reaching the PHRC property.

For the aforementioned reasons, the proposed project's wind and shadow impacts would be less than significant.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
10. RECREATION—Would the project:					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☒	☐	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒	☐
c) Physically degrade existing recreational resources?	☐	☐	☒	☐	☐

The proposed project does not include recreational facilities and would not require the construction or expansion of recreational facilities. Therefore, the proposed project would have no impact on Checklist item 10b, and it is not discussed further.

The nearest public open spaces in the project vicinity include the Potrero Hill Recreation Center (PHRC), located approximately one block to the southeast; McKinley Square, located approximately 0.3 miles to the west; Jackson Playground, located approximately 0.43 miles to the north; Potrero Del Sol Park and Rolph Playground, located approximately 0.62 miles southwest; and Franklin Playground, located 0.75

miles to the northwest. In addition to the surrounding parks, playgrounds, and recreation centers, the water storage tower approximately one block southwest of the project site is identified as open space by the *San Francisco General Plan.*[47] Thus, project residents would have convenient access to private and public open space.

The project site is located in an Open Space Service Area as identified by the *San Francisco General Plan* due to its walking proximity to open space areas.[48] The project site does not lie within an area identified in the *San Francisco General Plan* as a High Need Area for recreational facilities and improvements (to be given priority for new parks and recreational facilities in the City, the lower of the two subcategories within High Need Areas).[49] The proposed project would increase the use of existing community recreational facilities in the area, but the proposed project's increase in residents would not be considered a substantial contribution to the existing demand for public recreational facilities in this area and would not result in substantial physical deterioration of existing recreational resources. The proposed project would not require the construction or expansion of off-site recreational facilities that might have an adverse physical effect on the environment.

The *Showplace Square/Potrero Hill Area Plan* would preserve the character and scale of the Potrero Hill neighborhood, and would not substantially increase the population of the project area. The *Area Plan* Objective 5.1 recommends the addition of one public park or open space in the Showplace Square/Potrero Hill neighborhood, and Objective 5.5 recommends that existing open spaces and recreation centers be well-maintained for use by residents. The proposed project would not create a new cumulative demand for recreation or open spaces in the Potrero Hill neighborhood. The project would have a less than significant project-specific and cumulative impact on recreational resources.

The proposed project would provide a rear yard with approximately 620 square feet of common open space, a living roof, and decks on the second, third, and fourth levels with an additional 1,045 square feet of private open space for the Unit 2 residents.

For the above-mentioned reasons, impacts on recreational activities and facilities would be less than significant.

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[47] City of San Francisco General Plan, Recreation and Open Space Element, Map 2: Public Open Space Service Areas, Adopted July 1995.

[48] Ibid.

[49] City of San Francisco General Plan, Recreation and Open Space Element, Map 9: Open Space Improvement Priority Plan, Adopted July 1995.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
11. UTILITIES AND SERVICE SYSTEMS—Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐	☐
d) Have sufficient water supply available to serve the project from existing entitlements and resources, or require new or expanded water supply resources or entitlements?	☐	☐	☒	☐	☐
e) Result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐	☐

The project site is within an urban area that is well served by utilities and service systems, including sewer treatment plants, water supply facilities, and solid waste disposal. The proposed project would incrementally increase demand for and use of these services, but not in excess of amounts expected and provided for in this area.

Sewer and Wastewater Treatment Plant Capacity

The project site is served by San Francisco's combined sewer system, which handles both sewage and stormwater runoff. The Southeast Water Pollution Control Plant (Southeast Plant) provides wastewater and stormwater treatment and management for the east side of the city, including the project site. No major new sewer or stormwater facilities or construction would be needed to serve the proposed project. The proposed project would meet the wastewater pre-treatment requirements of the San Francisco Public

Utilities Commission, as required by the San Francisco Industrial Waste Ordinance in order to meet Regional Water Quality Control Board requirements.[50] The proposed project, with approximately four residents, would consume approximately 248 gallons of water per day,[51] and would thus be expected to generate approximately the same amount of wastewater per day. The proposed project includes reducing the size of the existing permeable rear yard from 760 square feet to 620 square feet. The addition of rainwater collection cisterns as part of the living roof would partially offset the 140 square feet of additional impermeable surfaces proposed, resulting in a less-than-significant impact on storm water runoff. The proposed building would not substantially increase the demand for wastewater treatment and would therefore result in a less-than-significant wastewater service impact.

Water Supply Facilities

As noted above, the proposed project would consume an estimated 248 gallons of water per day. The vacant building on the site currently consumes a negligible amount of water. Although the proposed project would incrementally increase the demand for water in San Francisco, the estimated increase in demand could be accommodated within anticipated water use and supply for San Francisco.[52] The new construction would be designed to incorporate water-conserving measures, such as low-flush toilets, as required by the *California State Building Code* Section 402.0(c). The proposed project would incorporate a rainwater cistern as part of the living roof, offsetting the amount of water required for irrigation to the rooftop garden. As discussed under Topic 7. Air Quality, during project construction, the project sponsor and project building contractor must comply with Ordinance 175-91, passed by the Board of Supervisors on May 6, 1991, which requires that non-potable water be used for dust control activities. Since the proposed project's water demand could be accommodated by the existing and planned supply anticipated under the San Francisco Public Utility Commission's *2005 Urban Water Management Plan (UWMP)* and would use best-practice water conservation devices, it would not result in a substantial increase in water use and could be served from the existing water supply entitlements and resources.

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[50] City and County of San Francisco, Ordinance No. 19-92, San Francisco Municipal Code (Public Works), Part II, Chapter X, Article 4.1 (amended), January 13, 1992.

[51] . Based on current residential use in San Francisco of 62 gallons per capita per day (gpcd) (SFPUC, *2005 Urban Water Management Plan for the City and County of San Francisco (UWMP)*, December 2005, pages 40 and 41, available online at http://sfwater.org/detail.cfm/MC_ID/7/MSC_ID/106/MTO_ID/NULL/C_ID/2776). The four project residents would consume approximately 248 gallons of water per day.

[52] San Francisco Public Utility Commission, *2005 UWMP*. The *2005 UWMP* uses the San Francisco Planning Department's current long range growth projections – *Land Use Allocation 2002* – an estimate of total growth expected in the City and County of San Francisco from 2000 – 2025. These projections have similar employment growth and approximately 15,000 higher household growth than ABAG Projections 2002.

Therefore, the proposed project would result in less-than-significant project-specific and cumulative water impacts.

Solid Waste

Solid waste from San Francisco is transferred to the Altamont Landfill (landfill) at 10840 Altamont Pass Road in Livermore.[53] The landfill is owned and operated by Waste Management of Alameda County. The landfill has an annual solid waste capacity of 2,226,500 tons for the City of San Francisco. The City is well below its allowed capacity, generating approximately 550,000 tons of solid waste in 2005.[54] Recycling, composting, and waste reduction efforts are expected to increasingly divert waste from the landfill.

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed Assembly Bill 939, the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties in California were required to divert 25 percent of all solid waste from landfill or transformation facilities by January 1, 1995, and 50 percent by January 1, 2000. San Francisco diverted 36 percent of solid waste in 1995, 46 percent in 2000, and about 64 to 67 percent from 2002 through 2005.[55] In light of the above, the proposed project would result in less-than-significant project-specific and cumulative solid waste impacts.

For the reasons stated above, the impacts of the proposed project on utilities and service systems would be less than significant.

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[53] Integrated Waste Management Board website, Solid Waste Facility Details, http://www.calrecycle.ca.gov/SWFacilities/Directory/01-AA-0009/Detail/, accessed January 7, 2010.

[54] Brad Drda, Environmental Services Manager, Sanitary Fill Company, personal communication with EIP Associates, March 14, 2006.

[55] Integrated Waste Management Board, Countywide, Regionwide, and Statewide Jurisdiction Diversion Progress Report, http://www.calrecycle.ca.gov/LGCentral/Tools/MARS/jurdrsta.asp, accessed January 7, 2010.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
12. **PUBLIC SERVICES**—Would the project:					
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any public services such as fire protection, police protection, schools, parks, or other services?	☐	☐	☒	☐	☐

Police and Fire Protection

The project site receives police and fire protection services from the San Francisco Police Department and the San Francisco Fire Department, respectively. The proposed addition of approximately four residents would incrementally increase the demand for fire and police services to the project site. Police protection is provided by the Bayview Station located at 201 Williams Street, approximately two miles south. The nearest fire station is Station 37, located on the project block to the southwest at 798 Wisconsin Street. The Police and Fire Departments monitor changing conditions, such as new development, in their service areas, and they address associated staffing, equipment, and facility needs each year through the City's annual operating and capital budget process. Although the proposed project could increase the number of calls received from the area or the level of regulatory oversight that must be provided as a result of the increased concentration of activity on site, the increase in responsibilities would not likely be substantial in light of the existing demand for police and fire protection services in the Potrero Hill area. The proposed building would be required to comply with the current *Building Code*'s fire safety and fire prevention standards. The increase in demand for police and fire protection services resulting from the proposed project expansion would not be substantially greater than existing demand for fire and police protection services in the project area, and meeting this additional service demand would not require the construction of new police or fire prevention facilities. The proposed project would therefore not result in a significant environmental impact on police or fire protection services.

Schools and Recreation Facilities

Some residents of the two proposed dwelling units may be families with school-aged children. The two residential units would include one one-bedroom unit and one three-bedroom unit. The two units would generate approximately 0.4 students.[56] It is anticipated that the existing schools could accommodate these students. The nearest public elementary schools are Daniel Webster Elementary School at 465 Missouri Street, about two blocks from the project site, Buena Vista Alternative Elementary at 2641 25th Street, about 9 blocks southwest of the project site, and Bryant Elementary School at 1050 York Street, also about 9 blocks southwest of the project site. The nearest public middle school is Enola Middle School at 655 De Haro Street, approximately two blocks from the site, and the nearest public high school is Mission High School at 3750 Eighteenth Street, approximately five miles west of the site.

The San Francisco Unified School District (SFUSD) is currently not a growth district, and facilities throughout the City and County are generally underutilized. The SFUSD currently has more classrooms district-wide than it needs, and the surplus is predicted to increase over the next ten years as enrollment shrinks.[57] The SFUSD has responded to these trends with its decisions in January 2006 over school closures and mergers.[58] No construction of schools is planned near the project site. An increase in students associated with the proposed project would not substantially change the demand for schools, and the school district would be able to serve the students generated by the proposed project. As is standard for all new development projects, the proposed project would be assessed at $2.24 per gross square foot of residential space under the SFUSD's development impact fee. These funds could be used to rehabilitate underutilized schools to accommodate the additional students generated by the proposed project.[59] Thus, the proposed project would not create a substantial adverse fiscal or service impact to San Francisco's schools. For the reasons above, the proposed project's impact on school facilities would be less than significant.

For the reasons discussed above, the proposed project's impact on public services would be less than significant.

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[56] The California State Department of Education uses the statewide student generation rates they developed from statewide sampling across the full spectrum of types of dwelling units of 0.5 elementary or middle school students and 0.2 high school students per dwelling unit. These rates are used for facility planning purposes by districts that have not developed their own rates. Since the state rates do not reflect the concentrated urban conditions, the San Francisco Unified School District (SFUSD) uses a student generation rate of 0.203 students per new housing unit. See discussion in the Eastern Neighborhoods Rezoning and Community Plan Initial Study. A copy of this document is available for public review at the Planning Department, 1650 Mission Street, Suite 400, San Francisco, California, as a part of Case File No. 2004.0160E.

[57] SFUSD, *Facilities Master Plan*, 2003. Available for public review at the San Francisco Unified School District, 1550 Bryant Street, San Francisco.

[58] SFUSD, *School Closure Decision*, January 19, 2006, available online at: http://portal.sfusd.edu/data/home/School_Closure_Decisions.pdf, accessed October 8, 2007.

[59] Christina Mariscal, Clerk, Facilities and Real Estate Department, San Francisco Unified School District, telephone conversation, Michael Kent, August 24, 2009.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
13. BIOLOGICAL RESOURCES— Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☐	☒

The project site is within a developed urban area and possesses only 760 square feet of permeable rear yard. The existing yard is landscaped with shrubs and small trees. The trees and other landscaping on the site provide limited habitat for common wildlife species adapted to urban life, including sparrows and other common bird species as well as rodents. The site does not support any sensitive habitats or provide habitat for any rare or endangered plant or animal species, and the proposed project would not affect or substantially diminish plant or animal habitats, including riparian or wetland habitat. The proposed project would include paving of approximately 140 square feet of the existing rear yard that would be offset by the addition of a landscaped living roof, and would not interfere with any resident or migratory species or affect any rare, threatened, or endangered species. There are no adopted habitat conservation plans applicable to the project site. Therefore, Checklist items 13b, 13c, and 13f are not applicable to the proposed project.

The San Francisco Board of Supervisors adopted legislation that amended the City's Urban Forestry Ordinance, *Public Works Code* Sections 801 et. seq., to require a permit from the Department of Public Works (DPW) to remove any protected trees. Protected trees include landmark trees, significant trees, or street trees located on private or public property anywhere within the territorial limits of the City and County of San Francisco. No protected trees exist on the project site and therefore, none would be removed as a result of the proposed project. The proposed project would be required to include one street tree, Based on the above, the proposed project would have no significant impact on biological resources and would comply with all city requirements for tree protection and planting.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
14. **GEOLOGY AND SOILS—** Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	☐
iv) Landslides?	☐	☐	☒	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	☐
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	☐	☐	☒	☐	☐

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☐	☒
f) Change substantially the topography or any unique geologic or physical features of the site?	☐	☐	☐	☒	☐

The project site is in an area served by the City's sewer system; therefore, the issue of the site's soil capacity to support the use of septic tanks or alternative wastewater disposal systems is not applicable to the proposed project, and Checklist item 14e is not applicable to the proposed project.

A California-licensed geotechnical engineer prepared a geotechnical investigation[60] for the proposed project, which is summarized below. The investigation included an initial site visit, inspection of material from two test pits (that were approximately three feet deep), review of available public geologic maps, description of the area geology and subsurface conditions, recommendations for foundation design, and conclusions regarding geotechnical seismic criteria in accordance with the current *Building Code*.

The site is located near the top of Potrero Hill on the east side of Wisconsin Street. At that location, Wisconsin Street slopes downward to the north at an inclination of about 15 percent (8 degrees). Geologic maps of the area indicate that serpentine bedrock is at or near the ground surface. Based on the test pits and the rock outcrop in the existing garage on the site, the bedrock appears to slope downward to the northeast. The rock is present at a shallow depth and undulates rather than being a smooth, planar (flat) surface.[61]

Seismically Induced Hazards

Based on its San Francisco location, it is likely that the site would experience periodic minor earthquakes and potentially a major (moment magnitude [Mw] greater than 7.1 characteristic) earthquake on one or more of the nearby faults during the life of the proposed development. The nearest faults are the San Andreas Fault, approximately 7.5 miles to the southwest and the Hayward Fault, approximately 11.5 miles to the northeast. The project site is not within an Earthquake Fault Zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act and no known fault or potentially active fault exists on the site. In a seismically active area, such as the San Francisco Bay area, the possibility exists for future faulting in areas where no faults previously existed. During an earthquake along any of the major faults mentioned above, the ground at the project site would experience very strong shaking. Strong shaking during an earthquake can result in ground failure associated with soil liquefaction,[62] lateral spreading,[63] and cyclic densification.[64] There are no mapped landslides in the area and the geotechnical consultant did not observe indications of landslides or other gross land movement on the property.[65]

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[60] Thomas J. Stimac, Stimac Associates, Inc., *Geotechnical Investigation, Proposed Susoev Residence, 749 Wisconsin Street, San Francisco, California*, December 18, 2008. This document is on file and available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case No. 2006.1506E.

[61] Ibid.

The Community Safety Element of the *General Plan* contains maps that indicate areas of the City where one or more geologic hazards exist. Maps 2 and 3 in the Community Safety Element of the General Plan show the intensity of ground shaking in San Francisco from two of the most probable earthquakes, one of magnitude 7.1 on the San Andreas Fault and one of magnitude 7.1 on the northern segment of the Hayward fault. On these maps, the project site falls into Class VI "Objects" of the Modified Mercalli Intensity scale. The project site is not in a groundshaking or earthquake landslide Seismic Hazards Study Zone designated by the California Division of Mines and Geology. The interactive GIS shaking intensity map published by the Association of Bay Area Governments (ABAG) indicates that the project site is located in an area subject to strong shaking intensity from a major earthquake on one of the regional active faults (the map is a composite of different earthquake scenarios).[66]

The project site is not located within or near an area delineated by the California Division of Mines and Geology as historically or potentially subject to liquefaction, as mapped in the *San Francisco General Plan*.[67;68] As mapped by the California Geological Survey, the project site is located in a "Very Low" Liquefaction Hazard Zone and between 0.25 and 0.5 miles from the nearest "Low, "Moderate," or "High" Liquefaction Hazard Zones. The project site is located in a "Very Low" Liquefaction Susceptibility Zone and about one block northwest of a "Low" Liquefaction Susceptibility Zone.[69] It appears to be within an area of potential landslide hazard as designated on Map 5 in the Community Safety Element. However, as noted above, the project site is not included in the mapped landslide hazard areas published by ABAG and based on Seismic Hazard Zones delineated by the California Geological Survey.[70]

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[62] Liquefaction is a phenomenon in which saturated, cohesionless soil experiences a temporary loss of strength due to the buildup of excess pore water pressure, especially during cyclic loading such as that induced by earthquakes. Soil most susceptible to liquefaction is loose, clean, saturated, uniformly graded, fine-grained sand and silt of low plasticity that is relatively free of clay.

[63] Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

[64] Soil compaction, or cyclic densification, is a phenomenon in which non-saturated, cohesionless soil is densified by earthquake vibrations, causing settlement.

[65] Stimac Associates, Inc., op cit, p.2.

[66] Association of Bay Area Governments, ABAG Geographic Information Systems, Interactive (GIS) Maps for Future Earthquake Scenarios, 2003, accessed December 4, 2009 at http://www.abag.ca.gov/bayarea/eqmaps/mapsba.html.

[67] City and County of San Francisco, Community Safety Element, *San Francisco General Plan*, April 1997, Map 4.

[68] As defined by the State of California Seismic Hazard Zones, City and County of San Francisco Official Map (November 17, 2001).

The geotechnical consultant concluded[71] the following:

- Geotechnical conditions were not observed that would preclude constructing the proposed new house.
- No evidence of landslides or other similar ground movement was observed.
- Foundations could consist of conventional shallow spread footings that rest on top of the serpentine rock at the project site.
- Concrete floors should be moisture or waterproofed. As a precaution against the potential for rainwater perching on top of the shallow groundrock, slab under drains should be provided to collect and discharge water.

The geotechnical consultant made technical recommendations regarding foundation design, including the following:

- All footings should bottom at least six inches into rock;
- Continuous footings should be at least 12 inches wide and isolated spread footings should be at least 18 inches wide;
- Footings should be embedded at least 12 inches below the lowest adjacent grade; and
- Because the rock level and depth vary, the final footing level will depend on the actual conditions encountered during construction.

The geotechnical consultant recommended that they review building plans and specifications to be sure they conform to their recommendations, and that they be present during construction to check conditions at the exposed footing subgrade. The project sponsor would be required to follow all geotechnical recommendations, as part of the Department of Building Inspection (DBI) review described below, under Plan Review.

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[69] Association of Bay Area Governments, ABAG Liquefaction Maps and Information, Liquefaction Hazard Maps for San Francisco, accessed March 15, 2010, http://gis.abag.ca.gov/website/liq/viewer.htm and http://gis.abag.ca.gov/website/liq_scenario_maps/viewer.htm.

[70] Association of Bay Area Governments, ABAG Geographic Information Systems, Interactive (GIS) Hazard Maps: CGS Earthquake-Induced Landslides, 2004, accessed January 11, 2010, at http://www.abag.ca.gov/bayarea/eqmaps/landslide/index.html.

[71] Stimac Associates, Inc., op cit, p. 3.

Although the project would introduce some terracing of the rear yard, it would not substantially change the topography of the site. The rock outcrop at the site, which would be partially removed as part of the proposed project, consists of serpentine bedrock, a rock common in San Francisco. The site does not contain unique geologic or physical features. Therefore, there would be no significant impact with respect to changes in topography or unique geologic or physical features of the site.

Plan Review

The final building plans would be reviewed by DBI. In reviewing building plans, the DBI refers to a variety of information sources to determine existing hazards and assess requirements for mitigation. Sources reviewed include maps of Special Geologic Study Areas and known landslide areas in San Francisco as well as the building inspectors' working knowledge of areas of special geologic concern. DBI requires that a site-specific soils report be prepared by a California-licensed geotechnical engineer prior to construction. Therefore, potential damage to structures from geologic hazards on a project site would be mitigated through the DBI and geotechnical report and review of the building permit application pursuant to DBI implementation of the *Building Code*.

The *Building Code* also contains provisions which require that grading on slopes of greater than 2:1, or where cut sections will exceed 10 vertical feet, must be done in accordance with the recommendations of a soil engineering report. The report would assess the nature and severity of the hazard(s) on the site and recommend project design and construction features that would reduce the hazard(s).

The project site is situated on a sloped lot that ranges in elevation from approximately 260 feet above mean sea level (msl) in the northeast corner to approximately 270 feet msl in the southwest corner. The surface topography in the vicinity of the project site is hilly, sloping downward toward the east to sea level at San Francisco Bay, about a mile to the east, and sloping upward toward the west to an elevation of about 309 feet msl at the water storage tank one block southwest of the project. As discussed in the geotechnical letter report,[72] the proposed building would be constructed on a poured concrete foundation, and would require excavation to a depth of approximately 2 feet to prepare the foundation. The final building plans would be reviewed by the DBI. In reviewing building plans, DBI refers to a variety of information sources to determine existing hazards and assess requirements for mitigation. Sources reviewed include maps of Special Geologic Study Areas and known landslide areas in San Francisco as well as the building inspectors' working knowledge of areas of special geologic concern. The above referenced geotechnical letter report would be available for use by DBI during its review of building permits for the site. Also, DBI would require that additional site-specific soils report(s) be prepared in conjunction with permit applications, as needed.

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[72] Ibid.

The project sponsor would follow the recommendations of the geotechnical letter summarized above, as well as any additional required geotechnical report in constructing the proposed project.

Excavation

Construction of the foundation would require excavation about two feet below the existing ground surface of the site and removal of approximately ten cubic yards of soil. Soil removed from the project site would be trucked to an appropriate landfill following testing pursuant to City and State requirements.

Dewatering

Due to the elevation and topography of the site, shallow groundwater is not expected to be present. The geotechnical investigation did not observe groundwater in the test pits; however, water may be perched on top of the rock surface. This is usually a local and transient condition that varies seasonally. Were dewatering to be required during construction, it would be subject to the requirements of the City's Industrial Waste Ordinance (Ordinance Number 199-77), requiring that groundwater meet specified water quality standards before it may be discharged into the sewer system. The Bureau of Environmental Regulation and Management (BERM), of the San Francisco Public Utilities Commission must be notified of projects necessitating dewatering, and may require groundwater analysis before discharge. Potential degradation of groundwater quality as a result of dewatering during project construction would be reduced to a less-than-significant level through the BERM requirement for retention of groundwater pumped from the project site in a holding tank, and analysis of the quality of this groundwater before it is discharged to the combined sanitary and storm drain sewer system.

Conclusion

In reviewing the final building plans, the DBI refers to a variety of information sources to determine existing hazards and assess requirements for development. Sources reviewed include maps of Special Geologic Study Areas and known landslide areas in San Francisco as well as the building inspector's working knowledge of areas of special geologic concern. During the DBI's review of building permit for the site, they could require that additional site-specific soils report(s) be prepared in conjunction with permit applications, as needed. Potential damage to structures from geologic hazards would be mitigated through the DBI review of the building permit application and implementation of the *Building Code*. For all of the above reasons, the proposed project would not result in significant impacts related to geology, topography, or seismic or soil hazards, either individually or cumulatively.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
15. HYDROLOGY AND WATER QUALITY—Would the project:					
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion of siltation on- or off-site?	☐	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map?	☐	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☐	☒

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
j) Expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☐	☒

Water Quality

The proposed project would not substantially degrade water quality or contaminate a public water supply. All wastewater from the proposed project building, and storm water runoff from the project site, would flow into the city's combined sewer system to be treated at the Southeast Water Pollution Control Plant prior to discharge into San Francisco Bay. Treatment would be provided pursuant to the effluent discharge standards contained in the City's National Pollutant Discharge Elimination System (NPDES) permit for the plant. In accordance with the permit, discharges to the Bay are in conformance with requirements of the Clean Water Act, Combined Sewer Overflow Control Policy, and the associated state requirements in the Water Quality and Control Plan for the San Francisco Bay Basin. During operations and construction, the proposed project would be required to comply with all local wastewater discharge and water quality requirements. Therefore, the proposed project would not substantially degrade water quality.

Surface and Groundwater

The project site is situated near the top of Potrero Hill, approximately 267 above mean sea level (MSL) and not likely near any groundwater resources. The proposed project would require excavation to a depth of approximately 2 feet below ground surface and the removal of an outcrop of serpentine bedrock measuring approximately 20 feet by 9 feet by 4 feet. During rainy weather, groundwater may seep through the soil and bedrock into excavation. Therefore, dewatering could be required during excavation. The Bureau of System Planning, Environment and Compliance of the Public Utilities Commission must be notified of projects requiring dewatering, and may require groundwater analysis before discharge. Any groundwater discharged during construction of the proposed project would be subject to requirements of the City's Industrial Waste Ordinance (Ordinance Number 199-77) that groundwater meet specified water quality standards before it may be discharged into the sewer system.

Should dewatering be necessary, the final soils report would address the potential settlement and subsidence impacts of this dewatering. Based on this discussion, the soils report would determine whether or not a lateral movement and settlement survey should be done to monitor any movement or settlement of surrounding buildings and adjacent streets. If a monitoring survey were recommended, DBI would require that a Special Inspector (as defined in Article 3 of the *Building Code*) be retained by the project sponsor to perform this monitoring. Groundwater observation wells might be installed to monitor potential settlement and subsidence. If, in the judgment of the Special Inspector, unacceptable movement were to occur during construction, groundwater recharge would be used to halt this settlement. The project sponsor would delay construction if necessary. Costs for the survey and any necessary repairs to service lines under the street would be borne by the project sponsor. If dewatering were necessary, the project sponsor and its contractor would follow the geotechnical engineers' recommendations regarding dewatering to avoid settlement of adjacent streets, utilities, and buildings that could potentially occur as a result of dewatering.

The project site is 70 percent covered with impervious surfaces and natural groundwater flow would continue under and around the site. Construction of the proposed project would increase impervious surface coverage on the site by 140 square feet to approximately 75 percent. This amount would not substantially reduce infiltration and groundwater recharge. Therefore, the proposed project would not substantially alter existing groundwater quality or surface flow conditions.

As noted above, the project site is 70 percent covered with impervious surfaces and the proposed project would not substantially change the amount of impervious surface area at the site. Four rooftop rainwater collection cisterns would partially offset storm water runoff. As a result, there would be no increase in the quantity and rate of storm water runoff from the site that flows to the city's combined sewer system. Site drainage would not be redesigned with the proposed project, and site runoff would continue to drain to the city's combined storm and sanitary sewer. Because storm water flows from the proposed project could be accommodated by the existing combined sewer system, and because there would not be an expected increase in storm water flows, the proposed project would not significantly impact surface or ground water quality nor cause substantial flooding or erosion.

Over the construction period, there would be a potential for erosion and transportation of soil particles during site preparation, excavation, foundation pouring, and construction of the building shell. Once in surface water, runoff, sediment and other pollutants could leave the construction site and ultimately be released into San Francisco Bay. As discussed above, storm water runoff from project construction would drain to the combined sewer and storm water system and be treated at the Southeast Water Pollution Control Plant. Pursuant to *Building Code* Chapter 33 (Excavation and Grading) and the City's NPDES permit, the project sponsor would be required to implement measures to reduce potential erosion impacts. Therefore, the proposed project would not substantially degrade water quality.

Flood Hazards

Development in the City and County of San Francisco must account for flooding potential. Areas located on fill or bay mud can subside to a point at which the sewers do not drain freely during a storm (and sometimes during dry weather) and there can be backups or flooding near these streets and sewers.

Flood risk assessment and some flood protection projects are conducted by federal agencies including the Federal Emergency Management Agency (FEMA) and the U.S. Army Corps of Engineers (Corps). The flood management agencies and cities implement the National Flood Insurance Program (NFIP) under the jurisdiction of FEMA and its Flood Insurance Administration. Currently, the City of San Francisco does not participate in the NFIP and no flood maps are published for the City. However, FEMA has prepared draft Flood Insurance Rate Maps (FIRMs) for the City and County of San Francisco for the first time. FIRMs identify areas that are subject to inundation during a flood having a 1 percent chance of occurrence in a given year (also known as a "base flood" or "100-year flood"). FEMA refers to the flood plain that is at risk from a flood of this magnitude as a special flood hazard area ("SFHA").

Because FEMA has not previously published a FIRM for the City and County of San Francisco, there are no identified SFHAs within San Francisco's geographic boundaries. FEMA has completed the initial phases of a study of the San Francisco Bay. On September 21, 2007, FEMA issued a preliminary FIRM of San Francisco for review and comment by the City. The City has submitted comments on the preliminary FIRM to FEMA. FEMA anticipates publishing a revised preliminary FIRM in the future, after completing the more detailed analysis that Port and City staff requested in 2007. After reviewing comments and appeals related to the revised preliminary FIRM, FEMA will finalize the FIRM and publish it for flood insurance and floodplain management purposes.

FEMA has tentatively identified SFHAs along the City's shoreline in and along the San Francisco Bay consisting of Zone A (in areas subject to inundation by tidal surge) and Zone V (areas of coastal flooding subject to wave hazards).[73] On June 10, 2008, legislation was introduced at the San Francisco Board of Supervisors to enact a floodplain management ordinance to govern new construction and substantial improvements in flood prone areas of San Francisco, and to authorize the City's participation in the NFIP upon passage of the ordinance. Specifically, the proposed floodplain management ordinance includes a requirement that any new construction or substantial improvement of structures in a designated flood zone must meet the flood damage minimization requirements in the ordinance. The NFIP regulations allow a local jurisdiction to issue variances to its floodplain management ordinance under certain narrow circumstances, without jeopardizing the local jurisdiction's eligibility in the NFIP. However, the particular projects that are granted variances by the local jurisdiction may be deemed ineligible for federally-backed flood insurance by FEMA.

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[73] City and County of San Francisco, Office of the City Administrator, National Flood Insurance Program Flood Sheet, available online at http://www.sfgov.org/site/uploadedfiles/risk_management/factsheet.pdf, accessed July 31, 2008.

Once the Board of Supervisors adopts the Floodplain Management Ordinance, the Department of Public Works will publish flood maps for the City, and applicable City departments and agencies may begin implementation for new construction and substantial improvements in areas shown on the Interim Floodplain Map.

According to the preliminary map, the project site is not within an A zone or a V zone.[74] In addition, there are no natural waterways within or near the project site that could cause stream-related flooding. The project site is not located within an area that would be flooded as the result of failure of a levee or dam,[75] nor is it located in an area identified as subject to seiche or potential inundation in the event of a tsunami along the San Francisco coast, based on a 20-foot water level rise at the Golden Gate (Maps 6 and 7 of the Community Safety Element of the *San Francisco General Plan*). In addition, the relatively developed area of the project site would not be subject to mudflow. Therefore, Checklist items 15g, 15h, 15i, and 15j are not applicable to the proposed project.

Conclusion

Based on the information presented above, there would be no significant hydrology or water quality impacts as a result of the proposed project.

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[74] Federal Emergency Management Agency, Preliminary Flood Insurance Rate Map, City and County of San Francisco, California, Panel 120, September 21, 2007, available on the Internet at http://www.sfgov.org/site/uploadedimages/risk_management/j120A_jpg.jpg, accessed August 20, 2008.

[75] ABAG, http://www.abag.ca.gov/cgi-bin/pickdamx.pl, accessed February 25, 2008.

Topics:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Not Applicable
16. **HAZARDS AND HAZARDOUS MATERIALS**—Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury, or death involving fires?	☐	☐	☒	☐	☐

This section addresses the potential hazards on the project site including asbestos, lead-based paint and mold in the existing building, contaminants in the soil, emergency response plans, and fire hazards.

The project site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, nor is it within an airport land use plan area, or in the vicinity of a private airstrip. Therefore, Checklist items 16d, 16e, and 16f are not applicable to the project site.

Project Site

The project site has been occupied since approximately 1898 with a single-family home. Prior to construction in 1898, the project site was undeveloped, and has never been used for industrial or commercial uses. As mentioned above, the project site is not listed on the Hazardous Waste and Substances Sites List, commonly called the "Cortese List," compiled by the California Department of Toxic Substances Control (DTSC) pursuant to Government Code Section 65962.5. The project site is not listed in database reports from State and federal regulatory agencies that identify businesses and properties that handle or have released hazardous materials or waste.

The proposed project would likely result in the handling a range of common types of hazardous commercial and household products, such as paints, cleaners, toners, solvents, disinfectants, and detergents. Household products are labeled to inform users of potential risks and to instruct them in appropriate storage, handling, and disposal procedures. Therefore, hazardous materials use for operating the proposed residential building would not pose a substantial public health or safety hazards to the surrounding area.

Surrounding Area

Surrounding property historically has been used almost exclusively for residential structures since the area's development in the late 1800's. Migration of petroleum hydrocarbon or volatile organic compound (VOC) contamination is generally via groundwater. The local topography suggests that local groundwater flows east, toward San Francisco Bay. Contaminated sites located hydrologically downgradient from the project site are not expected to represent a potential threat to groundwater quality beneath the project site. Sites that are hydrologically cross-gradient relative to the project site are not expected to represent a concern unless close proximity allows for the potential of lateral migration.

Sites in the project vicinity that are listed in database reports from State and federal regulatory agencies which identify businesses and properties that handle or have released hazardous materials or waste are discussed below.

Within a half-mile of the proposed project, only one property appears on the EnviroStor list maintained by the California Environmental Protection Agency, Department of Toxic Substances Control. Located at 17th and Rhode Island, the De Haro/Rhode Island Live/Work spaces were the site of a voluntary cleanup resulting from past illegal dumping on the site, a former railroad right-of-way. The site is located downgradient from the project site, and no contamination of the project site from this site would be possible.

Twenty-one sites within one-half mile of the project site are listed on the Leaking Underground Storage Tanks (LUST) list of known sites with current or former leaking underground storage tanks, maintained by the Regional Water Quality Control Board (RWQCB). Most nearby cleanup sites are completed and closed with the exception of Chevron Station #9-1000 at the corner of 19th and Mississippi Streets, which is in the site evaluation stage for possible gasoline leakage, SF Muni Railway - Woods, located at 1095 Indiana Street, which is undergoing verification monitoring for possible gasoline leakage, and M. Toich and Sons, located at 1100 Potrero Avenue, which is undergoing remediation for possible gasoline leakage. Based on the relative distance from the project site, direction of groundwater flow, and/or current regulatory status, the LUST sites referenced above are not expected to represent a significant environmental concern for the project site. No other open RWQCB cleanup sites are located in the project area.

No sites within one-eighth mile of the project site were identified in the Resource Conservation and Recovery Act (RCRA) Program, in either the LG GEN (large generators) or SM GEN (small generators) categories.

Based on the information discussed above, there is no evidence of contaminated soil or groundwater related to the site. Due to the age of the existing building, asbestos and lead-based paint may be present (See the discussion under Hazardous Building Materials, below).

Naturally Occurring Asbestos in Serpentine Rock

Excavation, grading, and construction activities will disturb serpentine rock at the site, resulting in potentially significant health hazards from exposure to naturally-occurring asbestos, a component of serpentine rock. With required implementation of Air Resources Board regulations, contained in the California Code of Regulations (CCR) Section 93015: Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying and Surface Mining Operations, potential impacts due to the removal or disturbance of serpentine soils would be reduced to a less than significant effect.

CCR Section 93105 (e) specifies that for sites less than one acre in size, the following dust mitigation measures would be required at the start and maintained throughout the duration of the construction or grading activity. These measures will be collectively identified as Mitigation Measure M-HZ-1: (1)

construction vehicle speed at the work site must be limited to fifteen (15) miles per hour or less; (2) prior to any ground disturbance, sufficient water must be applied to the area to be disturbed to prevent visible emissions from crossing the property line; (3) areas to be graded or excavated must be kept adequately wetted to prevent visible emissions from crossing the property line; (4) storage piles must be kept adequately wetted, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile; (5) equipment must be washed down before moving from the property onto a paved public road; and (6) visible track-out on the paved public road must be cleaned using wet sweeping or a HEPA filter equipped vacuum device within twenty-four (24) hours.[76]

In addition to mitigation measure M-HZ-1 specified above, the proposed project would be required to follow San Francisco's Construction Dust Control Ordinance, described above under Checklist topic 7, Air Quality, Construction Emissions, page 48, which would reduce exposure to construction dust in general, and therefore, would also reduce exposure to naturally occurring asbestos disturbed during excavation and site grading.

For the reasons discussed above, potential impacts related to naturally occurring asbestos would be reduced to a less-than-significant level.

Hazardous Building Materials

A site inspection of the currently vacant building on the project site was conducted for a soundness report in October 2007. The site inspection addressed habitability of the structure, and noted several instances of asbestos in the popcorn ceilings, as well as mold spores in many sections of the house. Due to high humidity or water leaks, the popcorn ceiling finishes have begun to delaminate and flake, creating unsafe levels of exposure to asbestos throughout the structure.[77]

Asbestos

Asbestos-containing materials are found within the existing structure on site that would be demolished as part of the proposed project. Section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable Federal regulations regarding hazardous air pollutants, including asbestos. The BAAQMD is vested by the California legislature with authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement, and is to be notified 10 days in advance of any proposed demolition or abatement work.

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[76] Bay Area Air Quality Management District, *Final Regulation Order – Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations*, November 19, 2002. Available online at http://www.baaqmd.gov/~/media/Files/Compliance%20and%20Enforcement/Asbestos/final_reg_order.ashx, accessed March 22, 2010.

[77] Santos & Urrutia, *Soundness Report for 749 Wisconsin Street*, October 2007. This document is on file and available for public review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, as part of Case No. 2006.1506E.

Required notification includes the names and addresses of operations and persons responsible; description and location of the structure to be demolished or altered including its size, age and prior use, and the approximate amount of friable (subject to crumbling) asbestos; scheduled start and completion dates of demolition or abatement; nature of planned work and methods to be employed; procedures to be employed to meet BAAQMD requirements; and the name and location of the waste disposal site to be used. The BAAQMD randomly inspects asbestos removal operations. In addition, BAAQMD will inspect any removal operation for which a complaint has been received.

The local office of the State Occupational Safety and Health Administration (OSHA) must be notified of asbestos abatement to be carried out. Asbestos abatement contractors must follow State regulations contained in Title 8, Sections 341.6 through 341.14, and Section 1529 of the California Code of Regulations where there is asbestos-related work involving 100 square feet or more of asbestos-containing material. Asbestos removal contractors must be certified as such by the Contractors Licensing Board of the State of California. The owner of the property where abatement is to occur must have a Hazardous Waste Generator Number assigned by and registered with the Office of the California Department of Health Services in Sacramento. The contractor/hauler of the material is required to file a Hazardous Waste Manifest which details the hauling of the material from the site and its disposal. Pursuant to California law, DBI would not issue the required permit until the applicant has complied with the notice requirements described above. These regulations and procedures, already established as a part of the permit review process, would insure that any potential impacts due to exposure to asbestos within the building would be reduced to a level of insignificance.

Lead-Based Paint

Lead-based paint may be found in the existing building constructed circa 1898 and proposed for demolition as part of the project. Work that could result in the disturbance of lead paint must comply with Chapter 34, Section 3423, of the *Building Code,* Work Practices for Lead-Based Paint on Pre-1979 Buildings and Steel Structures. Where there is any work that may disturb or remove lead-based paint on the exterior of any building built prior to December 31, 1978, Chapter 34, Section 3423, requires specific notification and work standards, and identifies prohibited work methods and penalties.[78]

Section 3423 applies to the exterior of all buildings or steel structures on which original construction was completed prior to 1979 (which are assumed to have lead-based paint on their surfaces, unless demonstrated otherwise through laboratory analysis), and to the interior of residential buildings, hotels, and childcare centers. The ordinance contains performance standards, including establishment of containment barriers, at least as effective at protecting human health and the environment as those in the U.S. Department of Housing and Urban Development Guidelines (the most recent Guidelines for Evaluation and Control of Lead-Based Paint Hazards), and identifies prohibited practices that may not be used in disturbance or removal of lead-based paint. Any person performing work subject to the ordinance shall, to the maximum extent possible, protect the ground from contamination during exterior work; protect floors and other horizontal surfaces from work debris during interior work; and make all reasonable efforts to prevent migration of lead paint contaminants beyond containment barriers during the course of the work. Clean-up standards require the removal of visible work debris, including the use of a High Efficiency Particulate Air Filter (HEPA) vacuum following interior work.

Section 3423 also includes notification requirements and requirements for signs. Prior to commencement of work, the responsible party must provide written notice to the Director of DBI of the location of the project; the scope of work including specific location; methods and tools to be used; the approximate age of the structure; anticipated job start and completion dates for the work; whether the building is residential or nonresidential, owner-occupied or rental property, the dates by which the responsible party has or will fulfill any tenant or adjacent property notification requirements; and the name, address, telephone number, and pager number of the party who will perform the work. The code contains provisions regarding inspection and sampling for compliance by DBI, and enforcement, and describes penalties for non-compliance. Compliance with these regulations and procedures required by the *Building Code* would ensure that potential impacts related to the demolition and renovation of structures with lead-based paint would be less than significant.

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[78] These notices are commonly placed on residential and other buildings in San Francisco that are undergoing re-painting. Generally affixed to a drape that covers all or portions of a building, these notices are a required part of the Section 3423 notification procedure.

Mold

There has been growing concern regarding the adverse health consequences associated with exposure to mold.[79] In California, the Toxic Mold Protection Act of 2001 (SB 732) was enacted January 1, 2002. Under SB 732, the California Department of Public Health Services (CDPH) was charged with determining the feasibility of adopting permissible exposure limits for indoor molds, and, was to be assisted by a task force of volunteer stakeholders to develop new standards or guidelines that would achieve the following:

- assess the health threat posed by the presence of indoor molds,
- determine valid methods for fungal sampling and identification,
- provide practical guidance for mold removal and abatement of water intrusion,
- disclose the presence of mold growth in real property at rental or sale, and
- assess the need for standards for mold assessment and remediation professionals.

In 2005 in an implementation report issued by CDPH, scientists concluded that although recent studies have strengthened the evidence between living or working in a damp environment and increased risk for respiratory symptoms, the role of mold growth in these complex environments is still unclear. A 2008 implementation update for SB 732 indicates that CDPH has not had funding to initiate and complete the tasks set forth in the proposed work plan above.

Currently, there are no specific regulations governing the protection of individual workers from harmful exposure to mold. Nonetheless, health effects of mold exposure may result in allergic reactions, fungal infections and other effects including fatigue, headache, fever and muscle aches. Workers carrying out mold remediation should take precautions as indicated in the IICRC S520 Mold Remediation Standard (Institute of Inspection Cleaning Restoration Certification) and U.S. Environmental Protection Agency (U.S. EPA) guidelines for personal protection equipment and containment equipment recommendations for mold remediation in schools and commercial buildings.[80] It should be noted that although the U.S. EPA guidelines were directed towards remediation work done in schools and commercial buildings, the guidance indicates these guidelines are appropriate when the affected area in a residential building is greater than 10 square feet. The mold abatement debris would not require characterization or disposal at a special waste facility.

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[79] California Department of Health Services, Occupational Health Branch, Hazard Evaluation System & Information Service. November 2005. *Mold in Indoor Workplaces*. Available online at http://www.cdph.ca.gov/programs/IAQ/Documents/moldInMyWorkPlace.pdf. [Accessed February 1, 2010].

[80] U. S. EPA. *Mold Remediation in Schools and Commercial Buildings*. Online at http://www.epa.gov/mold/table2.html, accessed February 1, 2010.

As part of the Soundness Report for the existing structure on the project site, a mold and asbestos survey was completed in November 2006 by American Air Testing, Inc. The results of the survey were attached as Appendix E to the soundness report for the subject building.[81] The survey reported the presence of mold in front and rear bedrooms, the back porch, and the heating system. The proposed project would demolish the existing structure. There is no requirement for the mold to be abated prior to demolition. In addition, as described above measures to contain NOA particulates and prevent dust would be followed in compliance with the BAAQMD Asbestos ACTM and the City's Dust Control Ordinance. Through these procedures, workers would not be subject to hazards as a result of the presence of mold or mold spores.

Other Potential Hazardous Building Materials

In addition to asbestos-containing building materials, lead-based paint, and mold, buildings can contain other potentially hazardous building materials, including polychlorinated biphenyl (PCBs) in fluorescent light fixtures. Newer fixtures would not contain PCB ballasts; however, confirmation would require individual inspection of each fixture or accurate replacement records to determine their age. Fluorescent light bulbs are also regulated with respect to disposal due to their mercury content.

Inadvertent release of such materials during renovation could expose construction workers, occupants, or visitors to these substances and could result in various adverse health effects if exposure were of sufficient quantity. Although abatement or notification programs described above for asbestos and lead-based paint have not been adopted for PCB and mercury testing and cleanup, or for other hazardous building materials, items containing these or other toxic substances that are intended for disposal must be managed as hazardous waste, handled in accordance with Occupational Safety and Health Administration (OSHA) worker protection requirements, and disposed of at appropriate waste facilities as required by law.

Nonetheless, potential impacts associated with encountering PCBs and mercury, or other hazardous substances in building materials would be considered a potentially significant impact. Hazardous building materials sampling and abatement pursuant to existing federal, state, and local laws and regulations prior to renovation or demolition work, as described in mitigation measure M-HZ-2, would reduce potential impacts associated with PCBs and mercury, and other toxic building substances in structures to a less-than-significant level. With the implementation of mitigation measure M-HZ-2, the proposed project would not have the potential to pose a direct (through material removal, if required) or indirect (through transport of materials or accidental release) public health hazard to construction workers, others at the construction site, or people in the surrounding neighborhood as a result of the proposed project.

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[81] Santos & Urrutia. November 2006. *Soundness Report for: Existing Building at 749 Wisconsin Street, San Francisco, California.* This report is available for public review at the Planning Department 1650 Mission Street, Suite 44, San Francisco, as part of case file number 2006.1506E.

Hazardous Emissions

As mentioned above under Checklist topic 12, Public Services, the site is located approximately 0.25 mile from Daniel Webster Elementary School (465 Missouri). Operation of the proposed project, a two-unit residential project, would not result in hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or wastes. Therefore, the proposed project would not create a hazardous condition with respect to the school. See also the discussion regarding mitigation measure M-HZ-1 with respect to measures required to minimize exposure to naturally occurring asbestos (NOA) described above.

Fire Hazards and Emergency Response and Evacuation Plans

San Francisco ensures fire safety primarily through provisions of the *Building* and *Fire Codes*. Potential fire hazards (including those associated with hillside development, hydrant water pressure, and emergency access) would be mitigated during the permit review process.

Potential public health and safety hazards related to the possible presence of hazardous materials on the project site, to the routine use of hazardous materials, and to potential fire hazards in the new building would be reduced to a less-than-significant level by regulations and procedures already established as part of the building permit review process, and implementation of mitigation measure M-HZ-1 and M-HZ-2.

> **Mitigation Measure M-HZ-1: Naturally Occurring Asbestos Control.** CCR Section 93105 (e) specifies that for sites less than one acre in size with NOA, the following dust mitigation measures would be required at the start and maintained throughout the duration of the construction or grading activity. The project sponsor shall ensure that the following measures are implemented throughout the duration of the construction or grading activity to reduce potentially significant impacts from NOA: (1) construction vehicle speed at the work site must be limited to fifteen (15) miles per hour or less; (2) prior to any ground disturbance, sufficient water must be applied to the area to be disturbed to prevent visible emissions from crossing the property line; (3) areas to be graded or excavated must be kept adequately wetted to prevent

visible emissions from crossing the property line; (4) storage piles must be kept adequately wetted, treated with a chemical dust suppressant, or covered when material is not being added to or removed from the pile; (5) equipment must be washed down before moving from the property onto a paved public road; and (6) visible track-out on the paved public road must be cleaned using wet sweeping or a HEPA filter equipped vacuum device within twenty-four (24) hours.

Mitigation Measure M-HZ-2: Hazardous Building Materials (PCBs and Mercury). The project sponsor shall ensure that pre-construction building surveys for PCBs and mercury are performed prior to the start of demolition, construction, or renovation. Any hazardous building materials so discovered would be abated according to federal, state, and local laws and regulations.

The project sponsor shall ensure that pre-construction building surveys for PCB- and mercury-containing equipment (including elevator equipment), hydraulic oils, fluorescent lights, lead, mercury, and other potentially toxic building materials are performed prior to the start of demolition, construction, or renovation. Any hazardous building materials so discovered would be abated according to federal, state, and local laws and regulations.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
17. MINERAL AND ENERGY RESOURCES— Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☐	☒
c) Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?	☐	☐	☒	☐	☐

Mineral Resources Impacts

All land in San Francisco, including the project site, is designated Mineral Resource Zone 4 (MRZ-4) by the California Division of Mines and Geology (CDMG) under the Surface Mining and Reclamation Act of 1975 (CDMG, Open File Report 96-03 and Special Report 146 Parts I and II). This designation indicates that there is inadequate information available for assignment to any other MRZ and thus, the site is not a designated area of significant mineral deposits. Since the project site is developed, future evaluation or designation of the site would not affect or be affected by the proposed project. There are no operational mineral resource recovery sites in the project area whose operations or accessibility would be affected by the construction or operation of the proposed project. Therefore, Checklist items 17a and 17b are not applicable to the proposed project.

Energy Impacts

The proposed project would consist of residential and parking uses. Development of these uses would not result in consumption of large amounts of fuel, water, or energy. The proposed project would meet or exceed current state and local standards regarding energy consumption, including Title 24 of the California Code of Regulations enforced by the DBI. For this reason, the proposed project would not cause a wasteful use of energy, and would have a less-than-significant impact on energy and natural resources. No substantial environmental effects are expected from the proposed project.

Electric generation to serve the proposed project would consume natural gas and coal fuel. The proposed project would not use substantial quantities of other non-renewable natural resources. It would not use fuel or water in an atypical or wasteful manner. Therefore, the proposed project would not have a significant effect on the use, extraction, or depletion of a natural resource nor contribute to a cumulative impact.

Power and Communications Facilities

The proposed project would require typical utility connections and would connect into existing power and communications grids. Any utility relocation would be completed without interruption of service to adjacent properties. San Francisco consumers have recently experienced rising energy costs and uncertainties regarding the supply of electricity. The root causes of these conditions are under investigation and are the subject of much debate. Part of the problem is thought to be that the State does not generate sufficient energy to meet its demand and must import energy from outside sources. Another part of the problem may be the lack of cost controls as a result of deregulation. The California Energy Commission (CEC) is considering applications for the development of new power-generating facilities in San Francisco, the Bay Area, and elsewhere in the State. These facilities will eventually increase the supply of energy. These efforts, together with conservation, will be part of the statewide effort to achieve sufficiency of energy supply relative to demand. The proposed project includes the use of photovoltaic cells for electricity production, and the use of solar water heating supplemented with an on-demand system. The project-generated demand for electricity would be small in the context of the overall demand within San Francisco and the State, and would not in and of itself require a major expansion of power facilities. No new power or communications facilities would be necessary as a result of project implementation, and thus the proposed project would not result in a significant physical environmental effect, either project-specific or cumulative, with respect to power and communications facilities.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
18. AGRICULTURE AND FOREST RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.— Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)) or timberland (as defined by Public Resources Code Section 4526)?	☐	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?	☐	☐	☐	☐	☒

The project site is located within an urban area in the City and County of San Francisco. The California Department of Conservation's Farmland Mapping and Monitoring Program identifies the site as *Urban and Built-Up Land*, which is defined as "... land [that] is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes." Because the project site does not contain agricultural uses and is not zoned for such uses, the proposed project would not convert any prime farmland, unique farmland or Farmland of Statewide Importance to non-agricultural use, and it would not conflict with existing zoning for agricultural land use or a Williamson contract, nor would it involve any changes to the environment that could result in the conversion of farmland. No part of San Francisco falls under the State Public Resource Code definitions of forest land or timberland; therefore, the project would not conflict with zoning for, or cause rezoning of, forest land, result in the loss of forest land, or convert forest land to non-forest use. Accordingly, all Checklist items (18a – 18e) are not applicable to the proposed project.

Topics:	*Potentially Significant Impact*	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*	*Not Applicable*
19. MANDATORY FINDINGS OF SIGNIFICANCE—Would the project:					
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐	☐
b) Have impacts that would be individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☒	☐	☐	☐	☐
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	☐

As discussed in Section E.4 Cultural and Paleontological Resources, above, **Mitigation Measure M-CP-1** has been incorporated into the proposed project to address potentially significant impacts to archeological resources. **Mitigation Measures M-HZ-1** and **M-HZ-2**, contained in Section E.16, Hazardous Materials, above, have been incorporated into the proposed project to address potentially significant construction-related impacts with respect to hazardous building materials. Implementation of these measures would reduce the potential impacts of the proposed project on archeological resources and hazardous building materials to a less-than-significant level. The proposed project could have a significant effect on historic architectural resources. The potential impacts to historic architectural resources will be analyzed in the EIR. As discussed in Topics 1 through 18 above, the proposed project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range or a rare or endangered plant or animal. Other than the impacts discussed above, the project would not otherwise degrade the quality of the environment or cause substantial adverse effects on human beings.

Cumulative analysis depends on a prediction of possible future environmental changes well beyond construction of the proposed project. As discussed in Topic 5, Transportation/Circulation, above, project contributions to cumulative traffic at intersections in the vicinity would not be substantial. The proposed project would not be considered to contribute incrementally to cumulative regional air quality conditions, or to contribute to significant cumulative noise impacts. Similarly, the proposed project would be consistent with the land use and height controls for the site and would not contribute to a cumulatively considerable land use or visual impact. No other significant cumulative impacts are anticipated. In summary, the proposed project would not have unavoidable environmental effects that are cumulatively considerable.

F. ALTERNATIVES

The EIR will analyze alternatives to the proposed project that would reduce or eliminate significant environmental effects, if any. At a minimum, the alternatives analyzed in the EIR will include the following:

1. A *No Project Alternative* in which the project site would remain in its existing condition, with the existing building.
2. A *Preservation Alternative* that would provide for a project that meets the Secretary of the Interior's Standards by preserving the existing historic resource.

The development of additional alternatives for evaluation will be guided by public comment during the scoping period and by the EIR's analysis of potentially significant environmental impacts.

G. DETERMINATION

On the basis of this initial study:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

DATE June 28, 2010

Bill Wycko
Environmental Review Officer
for
John Rahaim
Director of Planning

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